

KDHE SECTOR ASSESSMENT DECISION

SITE/FACILITY NAME: Standard Products, Inc. (Former)

Alias Site Names:

Address: 650 East Gilbert

City: Wichita County or Parish: Sedgwick State: Kansas

Refer to Report Dated: February, 2008 Report type: Unified Focused Assessment

Report Developed by: Robert Benne (KDHE)

DECISION: (1) Documented impact from radium dial operations. (2) Elevated levels of radium-226, arsenic, lead, and cadmium are present in soils above RSK levels and EPA-NRC screening levels (radium-226). (3) Radium-226 was also detected in ground water above EPA screening levels attributable to the site. (4) Site may qualify for further CERCLA response, including a removal action. (5) Responsible party search needed.


DISCUSSION/RATIONALE: The Standard Products, Inc. (Former) facility was located at the above address in Wichita, Sedgwick County, Kansas. The facility was the location of an aircraft instrument repair shop in the 1950s and 1960s. According to historical records reviewed for the Unified Focused Assessment, Standard Products took the name Standard Precision Inc., in 1965. Standard Precision, Inc., applied for a Kansas Radioactive Materials License. The facility moved to another location and operated as Standard Precision, Inc.; this site was also assessed through a Unified Focused Assessment and was documented as impacted by radium-226. National Cash Register (NCR) later acquired Standard Precision's assets from an NCR subsidiary that owned Standard Precision, Inc. The Standard Precision license was terminated in 1973 by NCR.

During the UFA, the maximum radium-226 laboratory detection in soil was 81,800 pCi/g, above its EPA/NRC screening level of 5 pCi/g plus background (using the maximum site-specific background result equates to 6.61 pCi/g). Elevated levels of lead, arsenic and cadmium were also identified in soils above RSK values. Multiple volatile organic compounds were identified in ground water, which is likely associated with the Gilbert and Mosley site. Radium-226 was identified in ground water above its MCL of 5 pCi/L at 156 pCi/L and appears to be attributable to the former Standard Products, Inc., facility.

The site appears to qualify for further CERCLA response including a Removal Site Evaluation if a PRP is not identified to participate in a KDHE program.

Report Reviewed By:

Randolph L. Brown, KDHE/BER

Signature: 

Date: 04/24/08

Site Decision

Made by: Rick L. Bean, Chief, Remedial Section, KDHE

Signature: 

Date: 04/25/08

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Superfund

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Curtis State Office Building
1000 SW Jackson, Suite 410
Topeka, Kansas 66614-1367

Kansas Department of Health and Environment

Unified Focused Assessment Report



Standard Products, Inc.
(Former)
650 East Gilbert Street
Wichita, Kansas

Bureau of Environmental Remediation

UNIFIED FOCUSED ASSESSMENT REPORT

**Standard Products, Inc. (Former)
650 East Gilbert Street, Wichita, Kansas**

**Prepared by:
Kansas Department of Health and Environment
Bureau of Environmental Remediation
Remedial Section
Site Assessment Program**

February 2008

State ID: C2-087-72288

Project Manager: Robert E. Benne, Environmental Scientist II

Field Team Members:
Randy Brown, Professional Geologist IV
Farrell Dallen, Environmental Technician IV
Mike LaBuda, Environmental Technician IV
Jessica Walker, Geology Associate

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1.0 Introduction

1.1 Purpose

The former Standard Products, Inc., (SPI) property was recommended for an environmental assessment as a result of a process that identified and ranked radium dial shop facilities in Kansas. The assessment is referred to as a Unified Focused Assessment (UFA) because elements of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) assessments; American Society for Testing and Materials (ASTM) Phase One and Phase Two environmental assessments; and *All Appropriate Inquiry* (AAI) components are included in the scope of the UFA assessment process. The purpose of this UFA is to determine whether the SPI property poses a threat to human health and the environment, and to propose recommendations for further action if necessary. The UFA performed for this property was consistent with the KDHE Work Scope for Radium Dial Shop Facilities.

1.2 General History

Radioluminescent paint and radium luminous compounds have been used extensively on watch and clock faces since the early 1900's. The use of early consumer products having radium as a component (hair tonic, toothpaste, ointments, elixirs, etc.) was terminated relatively quickly for health and safety reasons as the effects of radium exposure were elucidated. The wide use of radium in luminescent paints continued through World War II because the soft glow of radium-produced luminescence made aircraft dials, gauges, and other instruments visible to operators at night. Radium bromide is often mixed with zinc sulphide to produce a mixture used for luminous dials. The radium gives off radiation causing the zinc sulphide to glow.

By the 1960's more than 75 percent of the light aircraft produced in the United States were fabricated in the vicinity of Wichita, Kansas. Radium dial repair shops were set up in the Wichita area soon after World War II to upgrade and repair radium-bearing aircraft instruments. During this repair process the dials containing radium-bearing paint were removed, the radium-bearing paint stripped from the dials with solvent, and the dials repainted. These teardown and dial-stripping operations are potential sources for solvent, heavy metal, and radium contamination of buildings, soil, and ground water. Radium-226 (the first radioactive material used in radioluminescent paint) has not typically been used in commercial dial instrument repair since the 1970's in Kansas.

In Kansas, these types of facilities are or were licensed or should have been licensed by KDHE's Bureau of Air and Radiation (BAR) to use radioactive materials.

2.0 Property Location and Description

The former SPI radium dial shop facility was located at 650 East Gilbert Street in Wichita, Kansas. The property is located in the Northwest ¼ of Section 28, Township 27 South and Range 1 East, in east central Sedgwick County, Kansas (see Figure 1). The latitude and longitude of the property is North 37.674880° latitude and West -97.330500° longitude. Prior to obtaining a radioactive materials license SPI apparently operated at this location from as early as 1952 to as late as 1962. A property and vicinity location map showing the one property structure (warehouse building) and surrounding area is included as Figure 2 of Appendix A. An archive aerial photograph from 1950 shows a building complex of at least two structures that cover the eastern and southern extent of the property (see Figure 3). The polygonal-shaped commercial property encompasses approximately two and two-thirds acres, oriented north to south. The newer vintage warehouse building (located in the southeastern portion of the property area) covers approximately 11,000 square feet of space.

3.0 Property Background

3.1 History

The facility was in operation repairing aircraft instruments (including some with radium dials and faces) at this location from approximately 1952 to as late as 1962 under the business name Standard Products, Inc. SPI is listed in the 1952 Polk Directories for Wichita as being located at 650 East Gilbert Street (pre-license period). The company was incorporated in 1949. The exact nature of pre-license operations before 1953 is unknown, including the handling or use of radium dial instruments or paint.

Information from the Kansas Department of Health and Environment (KDHE) Bureau of Waste Management (BWM) files was nonexistent for SPI. File information for the SPI property was derived from Bureau of Air and Radiation (BAR) records and the approximate duration of operations from Polk Directories for Wichita. The Polk Directory listings for 650 E. Gilbert list both Production Products and Standard Products as tenants from 1952 to 1961, sharing a phone number. Corporate records for the state of Kansas show that this Standard Products dissolved in 1961, at which time Production Products changed its name to Standard Products. Based on BAR's records the facility was conducting radium dial instruments repair as early as 1953. In 1963, the then Standard Products, was renamed Standard Precision. In 1965 Standard Precision, Inc., applied for a radioactive materials license and was granted license #25-R061-01 in January 1966, by which time Standard Precision's business activity had been relocated to 4105 West Pawnee. Before that, several Kansas State Board of Health inspections (from 1953-55, 1959, and 1962) were conducted at the East Gilbert property. The inspections focused on personnel, work and storage surfaces, and the interior of the facility. Waste storage barrels located in the alley area east of the facility were screened and showed

radiation levels ranging from 6.5 to 55 (top to bottom of barrel) milliroentgens per hour (mR/hr). It is not known if a formal closeout survey was performed for the Gilbert property, but it is assumed if one was it only focused on internal building contamination. Information from a survey memorandum from the State Department of Health dated August 14, 1967, related the property had been impacted by a tornado two years earlier. The portion of the building at the Gilbert Street property where the radium painting had taken place now consisted of only a concrete slab. Radiation was detected (in counts per minute units) on tiles covering the concrete slab.

3.2 Previous Investigations

The former SPI property is within the boundaries of the Gilbert-Mosley (GM) site. As early as 1986 KDHE identified widespread chlorinated solvent contamination affecting the ground water in the central business district of Wichita. The GM site has at least six discrete contamination plumes. Trichloroethylene (TCE), tetrachloroethylene (PCE), cis-1,2-dichloroethylene (DCE), and vinyl chloride are the predominant components of contamination associated with the plumes. In the spring of 2001 the City of Wichita began implementing a KDHE approved Remedial Action Work Plan involving extraction wells, piping, and a treatment facility. Continuous operation of the containment wells and treatment system began December 2002.

3.3 Records Review

Environmental records searches consistent with ASTM 1527 were conducted to determine if contaminant releases, environmental assessments, or remedial actions have occurred on or adjacent to the property. Environmental records information was used to determine if state- or federally-regulated facilities are located on or adjacent to the property and was used to develop an assessment sampling strategy for the property.

3.3.1 Aerial Photographs

The aerial photography for Figure 2 was acquired from 2002 statewide digital ortho-photo quads (reference #25 Sanborn Map). The aerial photography (1950) for Figure 3 was acquired from the City of Wichita Planning Department (reference #13 Sanborn Map).

3.3.2 Property Ownership

A review of county appraiser and register of deeds records was performed to evaluate current and historical property ownership.

3.3.3 Sanborn Maps

There is coverage for Sanborn historical insurance maps for this property. From the 1914 map the property was historically used as a furniture manufacturing/warehouse facility with at least three different building complexes located on the east and southern portions of the property. The 1950 map indicates some consolidation of the building complexes

and the property was used to house a mattress factory, shuffle board factory, wholesale aircraft supply store (Standard Products, Inc.), and a wholesale home appliance store.

3.3.4 Receptors

Internet mapping services (such as MapQuest®), and topographic, county, and city maps were used to locate and identify potential receptors. Receptors such as schools, preschools, parks, churches, and hospitals within 0.5 miles of the former SPI property were located. Surface water bodies, wetland ecosystems, and other aquatic and terrestrial ecosystems within a 0.5 mile radius were also identified. The existence of public water supply wells, domestic wells, and public water supply surface water intakes were determined within a 1.0 mile radius of the property.

3.3.5 Federal and State Contaminated Site Search

Environmental Data Resource, Inc., (EDR) provided United States Environmental Protection Agency (EPA) and state database information in their Radius Map Report. Portions of the report are in Appendix B. EDR included 12 ASTM-required databases in its search of environmental records. See Table 1 (federal) and Table 2 (state) for a list of these databases, their corresponding ASTM radius distance, and the number of facilities reported within each radius distance. The scope of the records review did not include confirmation of the facilities listed as unmappable or orphan by regulatory databases. This radius map for the SPI property can be found in Appendix B of this report. Due to the number of monitoring wells in the area, only data from wells relatively close to the property were included in this report.

4.0 Physical Setting

4.1 Current Site Conditions

The current building located at 650 East Gilbert Street is located in the southeastern portion of the property. There is a paved alley along the southwest portion of the property that becomes unpaved as it continues to the north. Concrete foundations are located north, west and south of the building. A railroad right-of-way easement is located on the east side. A boundary dike of soil/debris surrounds a pit situated in the north portion of the property. The south frontage with Gilbert Street has a concrete sidewalk and narrow grassy right of way. An electric construction company utilizes the building for storage and at various portions of the property (especially north of the building) power and electric light poles are stored outside.

4.2 Land Use

Adjoining properties include commercial businesses adjacent the property to the south and north. To the east are railroad right-of-ways and to the south is Gilbert Street. To the

west and southwest are residential homes and a medical clinic. See Figure 2 for a property diagram and aerial photograph illustrating the subject and adjacent properties.

4.3 Soils and Geology

The topography near the property is influenced by the drainage basin of the Arkansas River. The river is located approximately three-fourths of a mile west of the property.

The Sedgwick County soil survey indicates that Canadian fine silty loam (0 to 60 inches in thickness) and the Urban land-Elandco silty loam (0 to 60 inches in thickness) is the soil type most predominant in the property area. The Canadian fine sandy loam is very friable and well drained. The Urban land-Elandco silty loam is a very friable, moderately to well-drained soil occurring in level urban or reworked areas. Air and water move through these soil types at a moderate rate and runoff is slow.

The property is situated upon unconsolidated alluvium and terrace deposits of the Arkansas River. The deposits are of Wisconsinian to Recent Age and have a saturated thickness of 60 to 70 feet. These deposits are an important aquifer in the area. The deposits are regionally composed of clayey silt and fine to coarse-grained quartz sand grading downward from fine to coarse arkosic gravel.

The Wellington Formation of the Cimmaronian Stage of the Lower Permian system underlies the unconsolidated deposits. The Wellington Formation occurs at the property at a depth of 70 to 80 feet below surface and is approximately 400 feet thick. The formation consists primarily of calcareous blue and gray shale containing several thin beds of impure limestone and thin beds of gypsum and anhydrite. Some beds of maroon and gray-green shale occur near the top of the formation. The Wellington Formation is considered the lower confining unit at the property. No wells in the property vicinity are known to obtain drinking water from this formation. Beneath these strata lie older Paleozoic sedimentary rocks, which are underlain by Precambrian granite.

4.4 Hydrogeology

Shallow ground water in the vicinity of the property occurs primarily in alluvial sand and gravel deposits. Where the sand and gravel is not present, ground water is found in silt and clay alluvium. The depth to ground water varies from 20 to 25 feet in this area. Ground water elevations demonstrate seasonal fluctuations: higher levels in the spring and lower in the fall. Ground water is assumed to flow primarily to the south in the vicinity of the property. As noted in Section 3.2 the GM redevelopment area remediation activity may modify ground water flow in the property area. The City of Wichita has installed recovery wells in the local area affecting ground water flow on the GM area.

5.0 Receptors

5.1 Human Receptors and Risk

The former SPI facility was located at 650 East Gilbert Street in Wichita, Kansas (see Figure 2). This part of Wichita consists of commercial properties with paved parking and some grassy areas between the businesses in all directions except to the east where there is a railroad right-of-way. Residential homes are located within 150 feet to the west, southwest, and south.

5.1.1 Soil Pathway

Potential soil pathway and direct contact receptors include employees of the facility and adjacent commercial facilities, maintenance and ground personnel of the area, and passers-by. It is anticipated that human contact with on-site and near surface soils is largely unlimited due to only one short stretch of confining fence located on the southwest side of the property. There are nine churches, two pre-schools, and two elementary schools located within a 0.5 mile radius of the former SPI property. Residential homes and a medical clinic border the property on the south and west sides.

5.1.2 Risk

Potential direct contact exposure pathways include dermal contact or close proximity to and the ingestion or inhalation of contaminated soils. Source areas were identified for concentrations exceeding the EPA/Nuclear Regulatory Commission (NRC) screening levels for radium-226 on the property. Source areas were identified for arsenic, cadmium, and lead above residential Risk-Based Standards of Kansas (RSK) values. Residential homes are located within 150 feet of the property. The exterior portion of the commercial lot is unsecured except for a short stretch of boundary fence along the southwest portion of the property.

5.1.3 Ground Water Pathway

Well surveys identified one nearby active well used for domestic purposes. The City of Wichita obtains its public water supply from the Wichita Well Field located within the Equus Beds region in northwest Sedgwick and southwest Harvey counties.

EDR, a contract information services company, has a comprehensive list of water wells near the property (see Appendix B). The Kansas Geological Survey (KGS) water well database indicates there are 155 wells in Section 28 of Township 28 South and Range 1 East. The SPI property is located in the northwest portion of Section 28. Within Section 28 there are 96 active monitoring wells, one well designated as other, one domestic well, one well designated for air conditioning, seven recovery/soil vapor/soil vent wells, three

injection/air sparge wells, eight lawn and garden wells, and 39 plugged wells. A copy of the KGS water well database search is included in Appendix C.

5.1.4 Risk

Data obtained during the UFA does indicate contaminant releases of hazardous substances to ground water associated with the property. Radium-226 concentrations from sample location #5 exceed its federal standard and TCE levels from every sampled location exceed the primary MCL for TCE.

5.2 Environmental Receptors and Risk

5.2.1 Receptors

Site reconnaissance activities and UFA research identified two ecologically sensitive areas just outside a 0.5-mile radius (west) of the former SPI property. The wetland areas are associated with the Arkansas River west of the property as shown on the National Wetlands Inventory Map (Figure 4). Based on the site reconnaissance, significant surface water runoff is not anticipated based on the existing topography. Surface water runoff will likely flow overland to storm sewers in the vicinity of the property.

5.2.2 Risk

Data obtained during the UFA does not suggest releases to nearby surface water bodies associated with the property.

6.0 Assessment Activities

6.1 Descriptions of UFA Activities

The following sections provide a description of the field activities conducted for the UFA on August 16, September 5, and December 5, 2007. Field activities (see Table 3 for personnel) included field screening for radium-226 and the collection of ground water and soil samples for analysis of radium-226, the eight Resource Conservation and Recovery Act (RCRA) metals, and volatile organic compounds (VOCs). The eight RCRA metals are arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Field activities were recorded in the field logbook, a copy of which is provided in Appendix D. Photographs of the property with field sampling locations are provided in Appendix E.

6.1.1 Field Objectives and Sampling Rationale

Permission to access the SPI property was obtained prior to initiation of field activities. Field investigation procedures therefore followed the Approach A sampling protocol

outlined in Section 3.0 of the KDHE work scope. Accordingly, KDHE collected soil and ground water samples from downgradient and adjacent to the facility footprint where possible. Two upgradient soil samples (upwind in the predominant wind direction) and an upgradient (as to ground water flow) ground water sample were also collected to serve as background samples.

As prescribed by the project work scope, KDHE developed a Field Sampling Plan outlining field-sampling methods. Field procedures were designed in accordance with the scope criteria and in response to the environmental conditions noted in Section 3.2. All field activities were conducted in accordance with the project Field Sampling Plan approved by KDHE and dated August 22, 2007. The following sections describe field methods in detail.

6.1.2 Field Procedures

Kansas One-Call was notified before field activity began to mark buried utilities. The sampling locations were flagged. The flagged location coordinate position was obtained using Garmin eTrex® global positioning system (GPS) equipment. Surface soil samples (0-0.5 feet in depth) were obtained by hand digging using stainless steel trowels. Soil samples (ranging from 0 to 8 feet) were collected using a Geoprobe® with clear acetate liner Macro-cores® where possible. The probes were pushed deep enough to encounter ground water or refusal. Ground water samples were obtained using polyethylene tubing equipped with a check valve. All investigation-derived waste (IDW) generated, including personal protective equipment, paper towels, etc., was placed in trash bags and properly disposed of off-site.

6.1.2.1 Soil Sampling Methods

Soil samples numbered by sampling location and depth interval were obtained (see Table 4 for location rationale and sampling parameters), including one upgradient ground water and two upgradient soil background locations (see Figure 5). Completely filled Macro-core® core-barrel recovery was usually attained, although in some locations non-native material and/or voided sections were present in the core-barrel. Descriptions of sample visual soil characteristics and constituent lithology were recorded. The soil samples were double bagged in quart-sized plastic bags, labeled, and preserved on ice in a cooler until laboratory submission. A total of 24 soil samples were collected at the property consistent with KDHE standard operating procedure (SOP) BER-03. Soil samples were submitted to the laboratory for analysis of radium-226 using EPA Method 9315. The samples were field screened for radium-226 with a Ludlum model 2241-2 digital survey meter with a Ludlum model 44-2, one-inch diameter by one-inch thick, sodium iodide T1 scintillator probe. Soil samples were submitted to the laboratory for analysis of RCRA total metals using EPA Methods 6010 or 7471, as appropriate. The soil samples were also field screened for metals using X-ray fluorescence (XRF) analysis with an Innov-X X-ray tube analyzer. Appropriate initial standardization and standards were analyzed consistent with EPA Method 6200. The soil samples were field screened for VOCs using a Perkin-Elmer 2020 photoionization detector (PID) while contained in the acetate liner

of the Macro-cores®. The PID was zeroed and calibrated to 98.5 parts per million with isobutylene on-site before field screening. One soil sample (sample location #5 from seven feet in depth) was obtained for VOC analysis using EPA Method 8260.

6.1.2.2 Ground Water Sampling Methods

Ground water samples were collected from four Geoprobe® locations on the property. A ground water sample was also collected from the upgradient background location. Ground water samples were obtained in vials and plastic bottles, labeled, and preserved on ice in a cooler until laboratory submission. The method of collecting the ground water samples followed KDHE SOP BER-01. Ground water samples were submitted to the laboratory for analysis of RCRA metals using EPA Method 6010 and 7470 (mercury), and radium-226 using EPA Method 903.0. Radium-226 ground water samples were field screened using the Ludlum meter. Ground water samples were analyzed for VOCs using EPA Method 8260. Table 5 describes EPA analytical methods, specific sample containers, preservation, and storage parameters for the various sample media.

6.2 Sampling Plan Deviations

Non-native material and/or void intervals were present in the core-barrel of the first Macro-core® at every probe location.

7.0 Assessment Results

7.1 Field Screening Results

A radiological surface soil survey of the former SPI property using the Ludlum meter was conducted on July 17 and 27, and August 1 and 6, 2007. The survey included areas adjacent to the building, the railroad right-of-way, and soil/grass/paved areas mainly north, south, and west of the building. Results of the survey indicated elevated readings for radiation at three localized areas that were subsequently mapped (see Figure 5). The highest surface reading recorded was 1,700 microrentgens per hour ($\mu\text{R/hr}$). This survey point is located in the northwest mapped area (see Figure 6) and subsequent samples were collected from this sample location designated #4. See Figures 6, 7, and 8 for radiological surface soil results and sampling locations for the three mapped areas.

All the soil and ground water samples collected were field screened for radium-226 using the Ludlum meter or the sample locations were screened in-situ prior to sampling. The ground water background location registered a maximum reading of 14 $\mu\text{R/hr}$ from a grassy surface. The upwind soil sample background locations registered a maximum reading of 15 $\mu\text{R/hr}$ from a grassy/soil surface. The highest reading screened from the property was 17,000 $\mu\text{R/hr}$ from a bagged subsurface soil sample at the #4 location from a depth of 2.75 feet.

All the soil samples were subjected to ex-situ XRF analysis. Appropriate initial standardization and standards were analyzed consistent with EPA Method 6200. Table 6 summarizes concentration levels for detections of lead and arsenic in milligrams per kilogram (mg/Kg).

7.2 Laboratory Results

Soil and ground water samples were evaluated by comparing laboratory- and field-based PID and XRF field screening data to the Tier 2 standards provided in Appendix A of the RSK Manual. Although the subject property is located in a commercial/industrial setting, UFA data were compared to RSK levels for both residential and non-residential scenarios.

KDHE RSK Tier 2 standards for contaminants identified in ground water default to EPA-promulgated primary and secondary Maximum Contaminant Levels (MCLs) established under the federal Safe Drinking Water Act for those contaminants in public drinking water supplies. Where primary or secondary MCLs have not been established, the ground water RSK goals are calculated using Risk Assessment Guidance for Superfund protocols and based on an excess lifetime cancer risk of 1 in 100,000 or a hazard index of 1.0, or if both risks are present, whichever yields the lower, more protective, dose.

Soil and ground water samples analyzed for radium were evaluated by comparing laboratory- and field-based (radiation field screening) data to the levels established by the joint NRC/EPA "Memorandum of Understanding" (MOU), and MCLs.

Appendix F provides the comprehensive laboratory reports.

7.2.1 Soil Results

Table 7 summarizes the concentration levels for soil samples analyzed for heavy metals sent to the Severn Trent Laboratories, Inc., (STL) in St. Louis, Missouri. Arsenic, cadmium, and lead were detected at levels exceeding residential soil pathway RSK standards. Sample #1 and # 5 collected at a depth interval of one to two feet had respective arsenic concentrations of 11.9 and 16.0 mg/Kg, exceeding the arsenic residential soil pathway RSK value of 11 mg/Kg. Sample #4 collected at two to four feet in depth, also exceed the RSK standard for arsenic. Note that the soil 3X background arsenic value for the respective depth exceeds the fore-mentioned analytical results (see Table 8). Also from sample #4, collected at 2.5 and 2.5 to 2.75 feet in depth, cadmium levels of 806 and 353 mg/Kg respectively exceed its residential soil pathway RSK value of 39 mg/Kg. From the same soil sample lead was detected at 477 and 1,340 mg/Kg respectively, exceeding the lead residential soil pathway RSK standard of 400 mg/Kg. Sample #5 from a depth of one to two feet also indicated an exceeding level of lead at 731 mg/Kg.

Soil samples sent to STL were also analyzed for radium-226 and results are expressed in units of picocuries per gram (pCi/g). Samples from four sampling locations at depths

ranging from zero to four feet below ground surface exceeded the EPA screening level for radium-226. See Table 7 and Figure 9 for the summary of results for radium-226. Sample #4 from 2.5 feet in depth had the highest concentration of radium-226 indicated at 81,800 pCi/g. The EPA/NRC MOU screening level for radium-226 in both residential and non-residential soils is 5 pCi/g plus background (which for this property is approximately 1.62 pCi/g), hence the property background is 6.61 pCi/g. Table 8 summarizes the results of metals and radium-226 from background samples collected at various depths.

From the #5 soil VOC sample (from seven feet in depth) only naphthalene and 1,2,4-trimethylbenzene was detected at concentrations estimated to be less than the reporting level for that contaminant. Table 9 summarizes the soil VOC analytical data.

7.2.2 Ground Water Results

Ground water samples were collected and filtered from five sampling locations (including the background location). Radium-226 was present in trace amounts or below background in ground water from all but one of the sample locations, including the background, with the detections well below the EPA screening level for radium-226 of 5 pCi/L (plus background, which for this property is approximately 0.45 pCi/L) and also below the federal MCL value for combined radium-226 plus -228 of 5 pCi/L. Sample #5, the exception, indicated a radium-226 level of 156 pCi/L, well over the federal standards.

Laboratory samples from ground water indicated concentrations well below respective federal MCL values for barium, DCE, PCE, toluene, 1,1,1-trichloroethane (TCA), and zinc. TCE was indicated in all samples in concentrations exceeding its federal MCL value. In sample #5 TCE levels were 0.013 mg/L, exceeding the MCL of 0.005 mg/L. Figure 10 shows ground water VOC results and Table 10 provides a summary of the ground water analytical data.

7.3 Quality Assurance / Quality Control Results

QA/QC samples included two duplicate samples and two trip blanks submitted for laboratory analysis. The duplicate results for detected constituents are within twenty percent of original results. The trip blank sample results give no indication of compromised data quality or cross-contamination.

Before XRF readings were recorded, an initial standardization procedure was run. The National Institute of Standards and Technology (NIST) high standard was analyzed twice during each procedure. The calculated percent difference for lead was less than 3% and arsenic was less than 5%. These are within acceptable limits (20%).

Laboratory detection limits were at or below relevant soil and ground water RSK values for the contaminants of concern specified in the KDHE work scope, and laboratory quality control information indicate accurate and precise laboratory data was generated for this UFA.

7.3.1 Comparison of Field and Laboratory Analysis

Soil samples from 24 discrete locations or depth intervals were field screened for heavy metals with XRF analysis with 16 samples being analyzed for heavy metals by various laboratories. Comparison of the field versus laboratory data indicated the XRF data tended to indicate higher values than laboratory analytical readings for lead and conversely lower for arsenic. The XRF data were statistically correlated to the analytical laboratory data. Correlation coefficients for arsenic were not used to calculate r^2 values due to the number of non-detections with the arsenic XRF data. Table 6 gives a summary of the comparison of field screened and laboratory data for lead and arsenic. The XRF data are thus at an apparent quantitative level for lead and qualitative for arsenic.

8.0 Summary and Conclusions

8.1 Summary

KDHE performed the UFA in conformance with the scope and limitations of ASTM Practice E 1527-05 on the former SPI property located at 650 East Gilbert Street in Wichita, Kansas. Property investigated also included locations adjacent to and north of the SPI property.

This UFA revealed evidence of the following *Recognized Environmental Conditions* (REC) in connection with the property:

- Concentrations of radium-226 are elevated in surface and subsurface soil collected and screened from many areas on the property.
- Arsenic, cadmium, and/or lead are present in different combinations in the soil with concentrations exceeding their respective residential RSK standards at sample locations Bg#1, #1, #4, and #5. However, the arsenic concentrations are less than the 3X background arsenic value.
- Ground water collected from sample location #5 indicated radium-226 levels exceeding federal standards.
- TCE was detected in all ground water samples and in concentrations exceeding its MCL concentration.

The UFA has revealed evidence of the following *Historical Recognized Environmental Conditions* (HREC) in connection with the property:

- The repair, handling, and storage of radium dial instruments is known to have occurred at this location in the 1950's and 1960's, based on documents KDHE reviewed.

On August 16, 2007, KDHE collected surface (0 to 6 inch) soil samples by stainless steel trowel at the two background locations south of the property and from two locations on-site (#1 and #4). On September 5, 2007, KDHE advanced three Geoprobe® direct-push borings on the property and a probe at the background location north of the property, for the purpose of collecting ground water samples and soil samples from Macro-cores®. Also, a surface soil sample was collected with a stainless steel trowel from sample location #3. A total of 16 soil samples were obtained from four Macro-cores® per the four sample locations. Ground water samples were collected from all four of the Geoprobe® locations. On December 5, 2007, KDHE advanced another Geoprobe® direct-push boring at sample location #5. A total of four soil samples were obtained from two Macro-cores®. A ground water sample was collected from sample location #5. Due to non-conclusive ground water analytical results because of high reporting limits, the four previous Geoprobe® locations were offset and ground water samples were collected for analysis with another laboratory.

All the ground water samples were analyzed for radium-226, RCRA metals, and VOCs. The ground water samples analyzed for radium-226 and RCRA metals were field filtered prior to submittal to the laboratory for analysis. All of the soil samples were field screened or analyzed for radium-226 and the eight RCRA metals. Soil was field screened for metals (ex-situ) using a XRF and for radium-226 using a Ludlum meter. Five ground water and eight soil samples were analyzed by STL for radium-226. Pace Analytical Services, Inc., (Pace) analyzed five soil samples for radium-226. One soil sample was analyzed for VOCs by STL. Eight soil samples were analyzed by STL, with eight soil samples analyzed by KDHE's Division of Health and Environment Laboratories (DHEL), for RCRA metals. DHEL analyzed five ground water samples for RCRA metals and VOCs. A total of 15 ground water samples, 17 soil samples, and two trip blanks were collected and submitted for laboratory analysis.

The highest field-measured surficial background value for radium-226 at the SPI property was 15 $\mu\text{R/hr}$. Radium-226 was detected during the surficial soil radiation survey at a maximum of 1,700 $\mu\text{R/hr}$ at sample location #4. Laboratory soil samples collected from this location exceeded the EPA screening level for radium-226 at two depths. The sample from 2.5 feet indicated 81,800 pCi/g and 70,900 pCi/g from 2.5 to 2.75 feet. The EPA/NRC-MOU screening level for radium-226 is 5 pCi/g plus background. For this property the EPA/NRC-MOU screening level is approximately 6.62 pCi/g for surficial soils.

All RCRA metals were detected in the soil samples collected at the property. Of the eight, arsenic, cadmium, and lead were present in levels above their respective residential soil pathway RSK goals. The soil 3X background arsenic value does exceed the arsenic results from all sample locations. The maximum level of arsenic was indicated from sample location #5 (from 1 to 2 feet in depth) at 16.0 mg/Kg. The maximum level of

cadmium was indicated at 806 mg/Kg from sample location #4 (2.5 feet in depth). Sample location #4 had the maximum lead level indicated from soil collected at 2.5 to 2.75 feet in depth at 1,340 mg/Kg.

Ground water collected from sample location #5 indicated radium-226 levels of 156 pCi/L. The EPA/NRC-MOU screening level for radium-226 is 5 pCi/L plus background. For this property the EPA/NRC-MOU screening level is approximately 5.45 pCi/L for ground water.

Various VOCs were detected in ground water collected from the property. TCE was indicated in all samples exceeding its federal MCL value (see Table 10).

8.2 Conclusions

The sampling objective was to evaluate environmental conditions by collecting data for the contaminants of concern including radium-226, RCRA metals, and VOCs. Intrusive sampling and laboratory analysis was conducted under specific quality control and data validation guidelines.

Results of the UFA indicate that soils present at the SPI property are contaminated with radium-226, metals, and VOC's. Apparently in the 1950's and 1960's the southern two thirds of the current property was the location of a large building complex (see figure 3). Scanning and subsequent sampling of the scanned areas of elevated radiation indicates radium-226 contamination is located around the perimeter of the former large building complex. Soil samples from the two corner locations (#1 and #4) and the #5 location also exceed their respective residential RSK standards for various combinations of arsenic and lead. The arsenic levels indicated, however, are below the site-specific three times (3X) background concentration. Cadmium levels in soil from location #4 far exceed its respective residential RSK standard.

Ground water collected from location #5 had levels of radium-226 that exceeded federal standards. No metals were detected in ground water above their respective RSK standards. Multiple VOCs were detected in ground water collected from the property, but the property is situated within the boundaries of the GM site area where VOC concentrations are known to be elevated. TCE was indicated in all samples in concentrations exceeding its federal MCL value. The TCE levels detected from the background, #1, #2, #4, and #5 ground water samples (0.0087, 0.010, 0.0089, 0.012, and 0.013 mg/L respectively) exceeded the primary MCL for TCE of 0.005 mg/L. VOC contamination in ground water is being addressed by the City of Wichita under a KDHE consent agreement for the GM area.

Significant levels of radium potentially attributable to radium dial repair operations appear to be present at the SPI, property in excess of EPA/NRC screening values for soil and ground water. Arsenic, cadmium, and lead were also detected in soil above residential RSK levels. KDHE will attempt to identify potentially responsible parties

(PRPs) to participate in a state cleanup program. The property may qualify for future CERCLA remedial and removal response if a viable PRP is not identified.

9.0 References

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10.0 Appendices

- A. Tables & Figures**
- B. EDR Report**
- C. KGS Well Data**
- D. Field Notes**
- E. Photographic Documentation**
- F. Analytical Data**

Appendix A

Tables & Figures

TABLE 1
Federal Databases

Database	Description	Radius (miles)	Facilities
NPL	The National Priorities List (NPL) is the United States Environmental Protection Agency (EPA) database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions under the Superfund Program.	1.125	0
CERCLIS/NFRAP	The CERCLIS database is a compilation of facilities the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. NFRAP (No Further Remedial Action Planned) refers to facilities that have been removed and archived from its inventory of CERCLA sites.	0.625	1
RCRA CORRACTS/TSD	The EPA maintains a database of Resource Conservation and Recovery Act (RCRA) facilities associated with treatment, storage, and disposal (TSD) of hazardous materials that are undergoing "corrective action." A "corrective action" order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.	1.125	0
RCRA Non-CORRACTS/TSD	The RCRA Non-CORRACTS/TSD database is a compilation by the EPA of facilities reporting the storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.	0.625	0
RCRA Generators	The RCRA Generators database, maintained by the EPA, lists facilities that generate hazardous waste as part of their normal business practices. Generators are listed as either large, small, or conditionally exempt. Large quantity generators (LQG) produce at least 100 kg/month of non-acutely hazardous waste (NAHW) or 1 kg/month of acutely hazardous waste. Small quantity generators (SQG) produce 100-1000 kg/month of NAHW. Conditionally exempt small quantity generators (CESQG) are those that generate less than 100 kg/month of NAHW.	0.375	0 (LQG) 11 (SQG)
ERNS	The Emergency Response Notification System (ERNS) is a listing compiled by the EPA on reported releases of petroleum and hazardous substances to the air, soil, and/or water.	0.125	0

TABLE 2
State Databases

Database	Description	Radius (miles)	Facilities
SHWS	The Kansas Department of Health and Environment (KDHE) maintains a database of State Hazardous Waste Sites (SHWS) records that are the states' equivalent to CERCLIS. The CERCLIS database is a compilation of facilities the EPA has investigated for a release or threatened release of hazardous substances pursuant to CERCLA. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent to Superfund), and potentially responsible party funded sites, are identified.	1.125	20
SWF	The KDHE maintains a database of Solid Waste Facilities (SWF) located within Kansas. The database information may include the facility name, class, operation type, area, estimated operational life, and owner.	0.625	1
LUST	The KDHE provides a computer generated database of the Leaking Underground Storage Tanks (LUST) in the State of Kansas.	0.625	27
UST	The KDHE provides a database of the registered Underground Storage Tanks (UST) in the State of Kansas. Information may include the owner and location of the UST.	0.375	7
VCP	The KDHE maintains a database of sites including in the Identified Sites List (ISL) that are identified as Voluntary Cleanup sites (VCP).	0.625	0
ISL	The KDHE maintains an ISL database that includes KDHE Bureau of Environmental Remediation regulated sites with actual or perceived environmental contamination. With the exception of storage tank sites, the ISL lists all KDHE-BER regulated sites with historical or ongoing activities being conducted under the KDHE Voluntary Cleanup, Brownfields, enforcement-based, Drycleaner, and other relevant State programs. ISL-listed sites may therefore include sites also listed in the SHWS and VCP databases.	0.625	22

TABLE 3

Project Personnel and Organization
Project Position / Staff / Responsibilities

Project Manager & Site Safety Officer	Robert Benne	Overall project organization and management, development of Field Sampling Plan and QAPP, quality control, data evaluation, field support, and report development. Site safety and Health and Safety Plan (HASP) implementation.
Geoprobe® Operator	Mike LaBuda	Geoprobe® operation, maintenance, field support.
Field Support	Farrell Dallen Jessica Walker	Sample collection and screening.
QA Data Validator	Randy Brown	Quality assurance and data validation.

TABLE 4

Sample Location Rationale and Sampling Parameters

Location / Description / Sample Depth(s) in Feet bgs / Rationale / Laboratory Analyses

SPI - Background (Bg 1 - 2)	Surface soil	0-0.5 feet bgs ₁	Upgradient (upwind) location	RCRA metals ₂ , VOC ₃ , Ra-226 ₄
SPI - 5	Ground water ₅ & subsurface soil	10-20 feet bgs ₁ & 0-12 feet bgs ₁	Unbiased sites	RCRA metals ₂ , VOC ₃ , Ra-226 ₄
SPI - 1 - 5	Subsurface soil	0-0.5 feet bgs ₁ & 0-8 feet bgs ₁	Biased sites	RCRA metals ₂ , VOC ₃ , Ra-226 ₄
SPI - 4	Ground water ₅	10-25 feet bgs ₁	Downgradient well	RCRA metals, VOC, Ra-226
SPI - Background	Ground water ₅ & subsurface soil	10-25 feet bgs ₁ & 0-8 feet bgs ₁	Upgradient (ground water flow) well	RCRA metals, VOC, Ra-226

Notes:

SPI = Standard Products, Inc.

Ra-226 = Radium-226

Subscript numbers:

1 bgs = below ground surface

2 Sample subject to metals analysis if XRF screening suggests impacts

3 Sample subject to VOC analysis if PID screening suggests impacts

4 Sample subject to Ra-226 analysis if radioactivity screening suggests impacts

5 Estimated depth based on generalized hydrogeologic conditions

TABLE 5**Analytical Methods and Sample Storage**

Sample Media / Analysis / EPA Analytical Method / Container-Storage / Preservative / Holding Time

Soil	RCRA Metals	6010	1 x 8 oz. glass jar, cool to 4° Celsius	none	6 months
Soil	Mercury	7471	1 x 8 oz. glass jar, cool to 4° Celsius	none	28 days
Soil	Radium-226	9315	1 x 8 oz. glass jar; cool to 4° Celsius	none	6 months
Soil	VOCs	8260	1 x 4 oz. glass jar; cool to 4° Celsius	none	14 days
Water	RCRA Metals	6010	Field filter through 0.45 micron filter; 1 x 250 ml plastic – cool to 4° Celsius	HNO ₃	6 months
Water	Mercury	7471	Field filter through 0.45 micron filter; 1 x 250 ml plastic – cool to 4° Celsius	HNO ₃	28 days
Water	Radium-226	903	Field filter through 0.45 micron filter; 1 x 1000 ml plastic – cool to 4° Celsius	HNO ₃	6 months
Water	VOCs	8260	2 x 40ml glass vials – cool to 4° Celsius	HCl	14 days
XRF soils	RCRA Metals	6200	Ziplock® plastic bag – cool to 4° Celsius	none	6 months

TABLE 6

Comparison of Field Screened to Analytical Laboratory Data for Standard Products, Inc.

SOIL SAMPLE ID	Pb=Lead in mg/Kg.				As=Arsenic in mg/Kg.			
	Pb XRF	Pb max.	Pb ave.	Pb lab.	As XRF	As max.	As ave.	As lab.
Bg-1 0-6"	122				<16			
Bg-1 0-6"	117	123	120.67	490	<17	0		10
Bg-1 0-6"	123				<16			
Bg-2 0-6"	197				<20			
Bg-2 0-6"	197	197	194.67	180	<20	0		<5.0
Bg-2 0-6"	190				<20			
Bkgd 0-6"	159				<18			
Bkgd 0-6"	169	206	178.00	180	<18	0		8.4
Bkgd 0-6"	206				<20			
Bkgd 0-2'	186				<21			
Bkgd 0-2'	218	218	164.67	110	<22	0		9.3
Bkgd 0-2'	90				<15			
Bkgd 2-4'	<15				<10			
Bkgd 2-4'	23	23	23.00	9.1	<11	13		8.5
Bkgd 2-4'	<15				13			
Bkgd 4-6'	<14				<10			
Bkgd 4-6'	29	29	26.50	5.4	<11	0		6.8
Bkgd 4-6'	24				<11			
Bkgd 6-8'	<14				11			
Bkgd 6-8'	<18	0			<12	11		
Bkgd 6-8'	<14				<9			
#1 0-6"	94				20			
#1 0-6"	97	97	91.00	65	<15	20		5.9
#1 0-6"	82				<14			
#1 1-2'	463				<31			
#1 1-2'	620	620	413.00	458	44	44		11.9
#1 1-2'	156				<19			
#1 2-4'	137				<17			
#1 2-4'	191	191	169.00		<21	0		
#1 2-4'	179				<19			
#1 5-6'	26				<11			
#1 5-6'	30	103	53.00		<11	0		
#1 5-6'	103				<16			
#1 6-8'	<13				<9			
#1 6-8'	17	17	17.00		<9	0		
#1 6-8'	<13				<9			
#2 1.75-2.25'	<91				<54			
#2 1.75-2.25'	121	121	80.00	157	<18	0		6.4
#2 1.75-2.25'	39				<13			

Bkgd or BG = Background " = Inches ' = Feet
 Red text = Exceeds Residential Soil Pathway RSK
 NA = Not Applicable

TABLE 6

Comparison of Field Screened to Analytical Laboratory Data for Standard Products, Inc.

SOIL SAMPLE ID	Pb=Lead in mg/Kg.				As=Arsenic in mg/Kg.			
	Pb XRF	Pb max.	Pb ave.	Pb lab.	As XRF	As max.	As ave.	As lab.
#2 2.25-4'	<14				<10			
#2 2.25-4'	19	19	18.00		<13	0		
#2 2.25-4'	17				<9			
#2 4-6'	19				<11			
#2 4-6'	100	100	48.33		<15	0		
#2 4-6'	26				<12			
#2 6-8'	18				<10			
#2 6-8'	15	18	16.50		<9	0		
#2 6-8'	<14				<9			
#3 0-6"	119				<18			
#3 0-6"	107	119	110.33	113	<18	0		3.8
#3 0-6"	105				<17			
#4 0-6"	163				<18			
#4 0-6"	122	163	137.00	91	<17	19		<5.0
#4 0-6"	126				19			
#4 2.5'	579				<38			
#4 2.5'	505	579	454.00	477	43	43		4.5
#4 2.5'	278				<26			
#4 2.5-3'	471				38			
#4 2.5-3'	657	1025	717.67	1340	<42	86		15.4
#4 2.5-3'	1025				86			
#4 3-4'	16				<10			
#4 3-4'	160	160	63.67	185	26	26		11
#4 3-4'	15				<10			
#4 4-6'	87				16			
#4 4-6'	119	119	103.00		<17	16		
#4 4-6'	<15				<10			
#4 6-8'	<67				<42			
#4 6-8'	<16	0			<10	0		
#4 6-8'	<15				<9			
#5 0-6"	173				<15			
#5 0-6"	192	192	147.00	175	<16	0		2.9
#5 0-6"	76				<12			
#5 1-2'	731				<30			
#5 1-2'	519	731	622.33	731	29	62		16
#5 1-2'	617				62			
#5 2-4'	13				<8			
#5 2-4'	19	19	16.33		<8	0		
#5 2-4'	17				<8			
#5 5-6'	19				<8			
#5 5-6'	25	38	27.33		<8	0		
#5 5-6'	38				<9			
#5 6-8'	19				<8			
#5 6-8'	17	19	17.33		<7	0		
#5 6-8'	16				<7			

Bkgd or BG = Background " = Inches ' = Feet
 Red text = Exceeds Residential Soil Pathway RSK
 NA = Not Applicable

TABLE 6

Comparison of Field Screened to Analytical Laboratory Data for Standard Products, Inc.

Duplicate								
#5 1-2'	174				25			
#5 1-2'	310	582	355.33	731	29	29		16
#5 1-2'	582				<29			
Correlation Coefficients	Maximum/Lab.		Ave./Lab.		Maximum/Lab.		Ave./Lab.	
	0.92		0.90		0.66		NA	

Bkgd or BG = Background " = Inches ' = Feet
 Red text = Exceeds Residential Soil Pathway RSK
 NA = Not Applicable

TABLE 7

Soil Data Summary Table for Laboratory Analyzed Samples (Metals)
Standard Products, Inc.

Element (RSK #)	3X Background 0-0.5 feet(^)	Sample # 1 0-0.5 feet(^)	Sample # 1 1-2 feet(*)	Sample # 2 0 - 2 foot(*)	Sample # 3 0-0.5 feet(*)	Sample #4 0-0.5 feet(^)	Sample #4 2.5 feet(*)	Sample #4 2.5-2.75 feet(*)	Sample #4 3-4 feet(*)	Sample #5 0-0.5 feet(*)	Sample #5 1-2 feet(*)
Arsenic (11)	25.2	5.9	11.9	6.4	3.8	<5.0 _B	4.5 _B	15.4	11	2.9	16.0
Barium (5,500)	720	99	154	113	82.2	96	75.2	290	176	96.0	228
Cadmium (39)	4.8	1.8	7.1	1.0	1.1	1.3	806	353	4.6	1.6	9.2
Chromium (390)	84	24	16.1	8.6	10.5	11	21.0		12.2	10.7	20.2
Copper (2,900)	261	56	NA	NA	NA	64	NA	NA	NA	NA	NA
Lead (400)	540	65	458	157	113	91	477	1,340	185	175	731
Mercury (2)	0.195	<0.050 _B	0.122	0.0732	NA	0.071	0.149	0.202	NA	0.0967	0.278
Radium-226 (6.62*)	4.86(¤)	2.09(¤)	3,020	419	3.34	2.16(¤)	81,800	70,900	366	136	1,150
Selenium (3,600)	<15.0	<5.0 _B	ND	ND	ND	<5.0 _B	ND	1.4 _B	1.1 _B	ND	ND
Silver (390)	<3.0	<1.0 _B	ND	ND	ND	<1.0 _B	ND	ND	ND	ND	18.0
Zinc (23,000)	870	220	NA	NA	NA	170	NA	NA	NA	NA	NA

Source: Division of Health and Environmental Laboratories (^), Test America Laboratories, Inc. (*), and Pace Analytical Services, Inc. (¤)

All units in milligrams per kilogram (mg/Kg) except Radium-226 = picocuries per gram (pCi/g)

(RSK #) = Tier 2 KDHE Risk-Based standards provided in Appendix A of the Risk-Based Standards for Kansas Manual (3rd Version): Soil pathway residential RSK standard.

(RSK #*) = EPA screening level for the site.

Bold Red text = Exceeds RSK or EPA standard.

< = less than

_B = result is less than reporting limit

NA = not analyzed

ND = not detected

TABLE 8
Background Soil Sample Results
Standard Products, Inc.

Element	Bg #1 0- 0.5 foot depth (mg/Kg)	Bg #2 0- 0.5 foot depth (mg/Kg)	Background 0- 0.5 foot depth (mg/Kg)	3 X Background 0-0.5 foot (mg/Kg)	Back- ground 0- 2 foot depth (mg/Kg)	Back- ground 2- 4 foot depth (mg/Kg)	Back- ground 4- 6 foot depth (mg/Kg)	Residential RSK (mg/Kg)	Non- residential RSK (mg/Kg)
Arsenic (11)	10	<5.0	8.4	25.2	9.3	8.5	6.8	11	38
Barium (5,500)	140	110	240	720	210	180	150	5,500	140,000
Cadmium (39)	1.6	7.6	1.6	4.8	1.2	<1.0	<1.0	39	1,000
Chromium (390)	21	23	28	84	25	28	21	390	4,000
Copper (2,900)	39	52	87	261	47	20	11	2,900	76,000
Lead (400)	490	180	180	540	110	9.1	5.4	400	1,000
Mercury (2)	<0.050	<0.050	0.065	0.195	NA	NA	NA	2	20
Radium-226 (*6.62)	1.49(μ)	1.32(μ)	1.62(μ)	4.86	2.2936	3.3457	2.9208	* 5 plus background	5 plus background
Selenium (3,600)	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	390	10,000
Silver (390)	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	390	10,000
Zinc (23,000)	190	270	290	870	180	70	46	23,000	610,000

Source: Division of Health and Environmental Laboratories and Pace Analytical Services, Inc. (μ)

All numerical values in milligrams per kilogram (mg/Kg) except Radium-226 = picocuries per Gram (pCi/g)

RSK = Tier 2 KDHE Risk-Based standards provided in Appendix A of the Risk-Based Standards for Kansas Manual (3rd Version): Soil pathway standard.

(* RSK #) = EPA screening level for the site (**5 + Background**) = **6.62 pCi/g**.

Bold Red text = Exceeds RSK or EPA standard.

NA = not analyzed

TABLE 9
Soil Sample Data Summary Table for Volatile Organic Compounds
Standard Products, Inc.

Compound	# 5 (from 7')	Residential Soil Pathway RSK	Residential Soil to Ground Water Protection Pathway RSK	Non-residential Soil Pathway RSK
Napthalene	0.0058 _{B,J}	104 _n	1.05	325 _n
1,2,4 – Trimethylbenzene	0.00063 _{B,J}	36.5 _n	0.78	2.6

Source: Severn Trent Laboratories, Inc.

All numerical values in milligrams per kilogram (mg/Kg)

(RSK #) = Tier 2 KDHE Risk-Based standards provided in Appendix A of the Risk-based Standards for Kansas Manual (3rd Version): Residential and Non-residential Soil Pathway or Soil to Groundwater Protection Pathway RSK standards.

Red, Purple, or Green text = Exceeds RSK standards.

_B = method blank contamination

_J = result is < than stated reporting limit

TABLE 10

Ground Water Data Summary Table for Laboratory Analyzed Samples
Standard Products, Inc.

Element or Compound	Background / Background X 3	# 1	#2	#4	#5	Residential RSK	Non-residential RSK
Barium	0.098 / 0.294	0.13	0.086	0.074	0.11	2.0 _m	2.0 _m
cis 1,2 – Dichloroethylene (DCE)	0.0086	0.0072	0.015	0.013	0.0096	0.07	0.07
Radium-226	0.45 _J (*) / 1.35	0.40 _J (*)	0.42 _J (*)	0.45 _J (*)	156 (*)	* 5.45/5.0 _m	* 5.45/5.0 _m
Tetrachloroethylene (PCE)	0.0019	0.0011	0.0016	0.0039	0.0039	0.005 _m	0.005 _m
Toluene	<0.00050	<0.00050	<0.00050	<0.00050	0.001	1 _m	1 _m
1,1,1 – Trichloroethane (TCA)	<0.00050	0.0035	<0.00050	<0.00050	0.00075	0.2 _m	0.2 _m
Trichloroethylene (TCE)	0.0087	0.010	0.0089	0.012	0.013	0.005 _m	0.005 _m
Zinc	0.013 / 0.039	0.011	0.032	0.027	0.047	5 _M	5 _M

Source: KDHE Division of Health and Environmental Laboratories (all except Radium-226), Test America Laboratories, Inc. (* - Radium-226)

All numerical values in milligrams per liter (mg/L) except Radium-226 = picocuries per Liter (pCi/L)

(RSK #) = Tier 2 KDHE Risk-Based standards provided in Appendix A of the Risk-based Standards for Kansas Manual
(3rd Version): Groundwater Pathway RSK standard.

(* RSK #) = EPA screening level for the site (5 + Background) = 5.45 pCi/g.

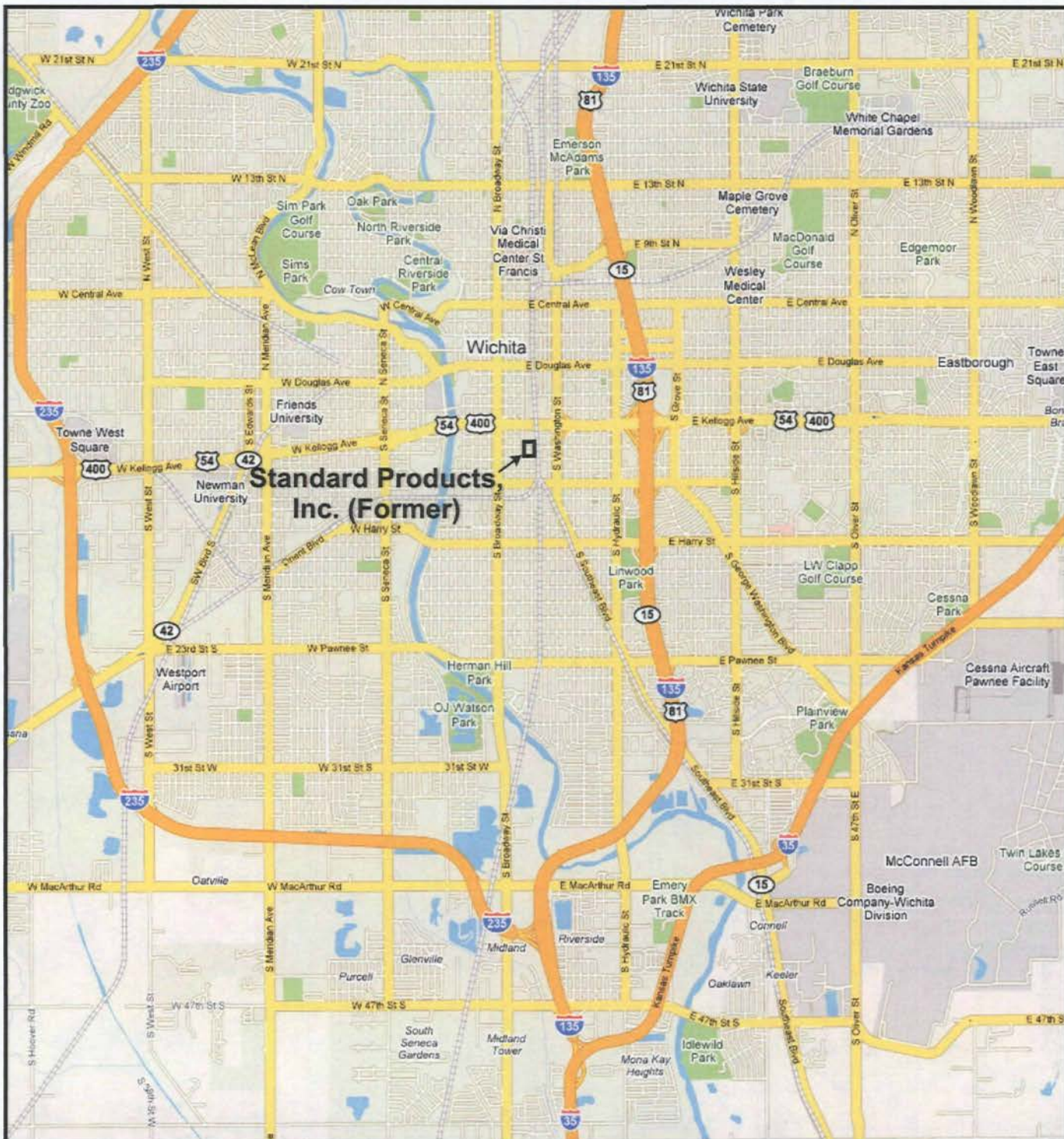
Red or Purple text = Exceeds RSK or EPA/Federal standards.

M = Secondary MCL

m = Primary MCL

< = less than

J = result is > than sample detection limit but < than stated reporting limit



Scale: 0 1 2
Scale in Miles

FIGURE 1

Area Map
Standard Products, Inc. (Former)
Wichita, Kansas



Map prepared by KDHE



Project Manager: REB Drawn by: PEBJ



Scale: 0 25 50 100 Feet



LEGEND

Site Boundary

FIGURE 2

Site Location Map
Standard Products, Inc. (Former)
Wichita, Kansas

Prepared by KDHE

Project Manager: REB Drawn by: PEBJ



0 40 80 160 Feet



Map Prepared by KDHE



LEGEND

- Sample Location
- Site Boundary

FIGURE 3

Archive Photo 1950 with
Superimposed Sample Locations
Standard Products, Inc.
Wichita, Kansas

Project manager: REB Drawn by: PBJ



Scale: 0 1000 2000 ft.



Map Designed by KDHE



LEGEND

- | | |
|-----------------------------------|------------------|
| Estuarine and Marine Deepwater | State highway |
| Estuarine and Marine Wetland | US highway |
| Freshwater Emergent Wetland | Roads |
| Freshwater Forested/Shrub Wetland | NHD Streams |
| Freshwater Pond | Urban Areas 300K |
| Lake | |
| Other | |
| Riverine | |

FIGURE 4

Ecological Map
Standard Products, Inc. (Former)
Wichita, Kansas

Project Manager: REB

Drawn by: PEBJ



Scale: 0 25 50 100 Feet



Prepared by KDHE



LEGEND

- Site Boundary
- Ground Water (0-8' soil)
- Soil (0-6")
- Radiation Survey Points (results in $\mu\text{R/hr}$)

FIGURE 5

Sample Locations
with Radiological Surface Survey Results
Standard Products, Inc. (Former)
Wichita, Kansas

For site sample locations within
gridded areas see figures 6-8

Project Manager: REB Drawn by: PEBJ

Project Manager: REB Drawn by: PEBJ



Scale: 0 2.5 5 10 Feet



LEGEND

- Site Boundary
- Ground Water (0-8' soil)
- Soil (0-6")
- 527 Radiation Survey Point (results in $\mu\text{R/hr}$)

FIGURE 7

Radiological Surface Survey Results
with Sample Locations in Southeast Grid
Standard Products, Inc. (Former)
Wichita, Kansas

Prepared by KDHE

Refer to figure 5

Project Manager: REB Drawn by: PEBJ



Scale: 0 1.25 2.5 5 Feet



LEGEND

- Site Boundary
- Ground Water (0-8' soil)
- 729 Radiation Survey Point (results in $\mu\text{R/hr}$)

Refer to figure 5

FIGURE 8

Radiological Surface Survey Results
with Sample Locations in Southwest Grid
Standard Products, Inc. (Former)
Wichita, Kansas

Prepared by KDHE

Project Manager: REB Drawn by: PEBJ



Scale: 0 25 50 100 Feet



Prepared by KDHE



LEGEND

- Sampling Location
- Local Roads

Results in pCi/g

FIGURE 9

Radium-226 Laboratory Analytical Soil Results
Standard Products, Inc. (Former)
Wichita, Kansas

Project Manager: REB Drawn by: PEBJ



Scale: 0 30 60 120 Feet



Prepared by KDHE

LEGEND

- Water Sample
- Local Roads

DCE - cis-1,2-Dichloroethylene
PCE - Tetrachloroethylene
TCA - 1,1,1-Trichloroethane
TCE - Trichloroethylene
Results in µg/L

FIGURE 10

Ground Water VOC Results
Standard Products, Inc. (Former)
Wichita, Kansas

Project Manager: REB Drawn by: PEBJ

Appendix B

EDR Report

The EDR Radius Map with GeoCheck®

Standard Products, Inc
650 East Gilbert Street
Wichita, KS 67211

Inquiry Number: 2042731.2s

October 02, 2007



**EDR® Environmental
Data Resources Inc**

The Standard in Environmental Risk Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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*Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.*

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

650 EAST GILBERT STREET
WICHITA, KS 67211

COORDINATES

Latitude (North): 37.674700 - 37° 40' 28.9"
Longitude (West): 97.330800 - 97° 19' 50.2"
Universal Transverse Mercator: Zone 14
UTM X (Meters): 647222.9
UTM Y (Meters): 4170829.5
Elevation: 1293 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 37097-F3 WICHITA EAST, KS
Most Recent Revision: 1982

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 6 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
LAND TOOL COMPANY 650 & 815 E GILBERT ST WICHITA, KS 67211	FINDS	110023128578
LAND TOOL COMPANY 650 & 815 E GILBERT ST WICHITA, KS 67211	CERCLIS	KSD984966549
STANDARD PRODUCTS, INC. (FORMER) 650 EAST GILBERT WICHITA, KS	SHWS Facility Status: Active	N/A
STANDARD PRODUCTS, INC. (FORMER) 650 E GILBERT ST WICHITA, KS 67211	FINDS	110030569891

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable") government records either on the target property or within the search radius around the target property for the following databases:

FEDERAL RECORDS

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
Delisted NPL	National Priority List Deletions
NPL LIENS	Federal Superfund Liens
CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Report
RCRA-TSDF	Resource Conservation and Recovery Act Information
RCRA-LQG	Resource Conservation and Recovery Act Information
ERNS	Emergency Response Notification System
HMIRS	Hazardous Materials Information Reporting System
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
US BROWNFIELDS	A Listing of Brownfields Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
SSTS	Section 7 Tracking Systems
LUCIS	Land Use Control Information System
DOT OPS	Incident and Accident Data
ICIS	Integrated Compliance Information System
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
US CDL	Clandestine Drug Labs
RADINFO	Radiation Information Database
LIENS 2	CERCLA Lien Information
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
RAATS	RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

LAST	Leaking Aboveground Storage Tanks
SPIILLS	Kansas Spills Database
INST CONTROL	Institutional Controls Information
VCP	Identified Sites List
DRYCLEANERS	Registered Drycleaning Facilities

EXECUTIVE SUMMARY

BROWNFIELDS..... Identified Sites List
CDL..... Clandestine Laboratory Data

TRIBAL RECORDS

INDIAN RESERV..... Indian Reservations
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
INDIAN UST..... Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants... EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 04/23/2007 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
AIRCRAFT INSTRUMENT & DEVLPMEN	317 E LEWIS ST	1/4 - 1/2NNW	L52	50

RCRAInfo: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators generate over

EXECUTIVE SUMMARY

1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-SQG list, as provided by EDR, and dated 08/13/2006 has revealed that there are 11 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
EASTON MFG CO INC THE	1023 S SANTA FE	0 - 1/8 SSE	B5	8
TRANNNY SHOP THE	518 E GILBERT	0 - 1/8 W	10	12
HEMCO PLUMBING AND HEATING INC	1139 S SANTA FE	1/8 - 1/4 S	12	14
TARGET REFRIGERATION INC	901 GILBERT	1/8 - 1/4 E	C15	22
WALT KEELER CO INC THE SHOP	1101 S MOSLEY	1/8 - 1/4 ESE	18	23
RESORT INC THE	725 E LINCOLN	1/8 - 1/4 SSE	23	28
JAYHAWK PLUMBING INC	800 E LINCOLN	1/8 - 1/4 SSE	E24	28
CAMELOT CLNRS	1001 S WASHINGTON	1/8 - 1/4 E	F26	29
TENNISON BROS INC	1021 S WASHINGTON	1/8 - 1/4 ESE	29	31
T & T TREE SVC INC	722 S WASHINGTON	1/8 - 1/4 ENE	G30	32

Lower Elevation	Address	Dist / Dir	Map ID	Page
BLADES AUTO	840 S ST FRANCIS	1/8 - 1/4 NNW	16	22

STATE AND LOCAL RECORDS

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Health & Environment's list: Summary of Bureau of Environmental Remediation Sites in Kansas.

A review of the SHWS list, as provided by EDR, and dated 08/20/2007 has revealed that there are 20 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
KELLEY INSTRUMENTS, INC. (FORM	1024 S. SANTA FE	0 - 1/8 SSE	B6	9
Facility Status: Active				
GILBERT & MOSLEY	GILBERT / MOSLEY STRE	1/8 - 1/4 E	C13	15
Facility Status: Active				
REID SUPPLY	911 INDIANAPOLIS STREET	1/8 - 1/4 ENE	D20	25
Facility Status: Active				
APCO FACILITY (FORMER)	1001 E LINCOLN ST	1/4 - 1/2 SE	I38	37
Facility Status: Active				
AIRCRAFT INSTRUMENTS & DEVELOP	535 S TOPEKA	1/4 - 1/2 NNW	L53	58
Facility Status: Active				
BUS BARN FACILITY SOURCE AREA	700 E WATERMAN	1/2 - 1 N	57	58
Facility Status: Active				
INSTRUMENTS, INC. (FORMER)	205 EAST LEWIS	1/2 - 1 NW	58	60
Facility Status: Active				
GREDE FOUNDRIES, INC.	805 E BOSTON	1/2 - 1 S	59	62
Facility Status: Resolved				
TRI-STATE NORTH	326-330 S. COMMERCE ST.	1/2 - 1 N	60	63
Facility Status: Active				

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
AVERY HYDRAULIC JACK (FORMER) Facility Status: Active	717 EAST HARRY	1/2 - 1 S	61	64
B&G PLATING Facility Status: Active	1025 E HARRY	1/2 - 1 SSE	63	67
BEST CLNRS & LAUNDRY Facility Status: Active	1614 S BROADWAY	1/2 - 1 SSW	64	68
KANSAS PLATING Facility Status: Active	110 N MOSLEY	1/2 - 1 NNE	66	73
TRI-STATE LAUNDRY SUPPLY Facility Status: Active	724 E OSIE ROAD	1/2 - 1 S	M67	74
HARCROS CHEMICALS INC Facility Status: Active	727 E OSIE	1/2 - 1 S	M68	76
123 N MARKET, WICHITA Facility Status: Resolved	123 N MARKET	1/2 - 1 NNW	69	79
ARTISTIC SERVICES Facility Status: Active	1612 E HARRY	1/2 - 1 SE	70	80
QUICK & EASY Facility Status: Active	1552 S HYDRAULIC	1/2 - 1 SE	71	82
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
LORAC COMPANY Facility Status: Active	624 EAST HARRY STREET	1/2 - 1 S	62	66
AVERY DIAL SHOPS (FORMER) Facility Status: Active	1218 EAST HARRY	1/2 - 1 SSE	65	72

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Health & Environment's Directory of Sanitary Landfills, Solid Waste Transfer Stations and Collectors in Kansas.

A review of the SWF/LF list, as provided by EDR, and dated 08/16/2007 has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
EAGLE TIRE CENTER	1128 E. LINCOLN	1/4 - 1/2ESE	J46	48

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Kansas Department of Environmental Protection's LUST Incident Report.

A review of the LUST list, as provided by EDR, and dated 07/16/2007 has revealed that there are 27 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
PERRY & SON CONSTRUCTION Facility Status: Closed	1024 S SANTA FE	0 - 1/8 SSE	B7	11
MCKESSON CORPORATION Facility Status: Closed	800 E GILBERT	0 - 1/8 E	9	12

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
LOPER ELECTRIC CO., INC Facility Status: Closed	914 E GILBERT	1/8 - 1/4E	C17	22
L J THOMPSON, INC. Facility Status: Closed	611 E LINCOLN	1/8 - 1/4SSW	22	27
MICHAELIS REAL ESTATE #9 Facility Status: Closed	801 E LINCOLN	1/8 - 1/4SSE	E25	29
HEPHNER TV Facility Status: Monitor	1002 S WASHINGTON	1/8 - 1/4E	F28	31
R-CON CORPORATION Facility Status: Closed	826 E. LINCOLN	1/8 - 1/4SSE	H31	32
WALT KEELER Facility Status: Closed	826 E LINCOLN	1/8 - 1/4SSE	H33	35
KANSAS BUILDING SUPPLY Facility Status: Closed	707 S WASHINGTON	1/4 - 1/2ENE	G34	35
SUNSET PRODUCTS INC. Facility Status: Closed	750 SOUTH EMPORIA	1/4 - 1/2NNW	35	36
TOWN & COUNTRY #04 Facility Status: Monitor	921 S. BROADWAY	1/4 - 1/2WNW	36	37
PRICE BROS EQUIPMENT Facility Status: Closed	619 S WASHINGTON	1/4 - 1/2ENE	37	37
HOUSE OF STEWARTS REALTY Facility Status: Closed	1001 E LINCOLN	1/4 - 1/2SE	I39	39
APCO (MARKS LINCOLN ST APCO) Facility Status: Monitor	1002 E LINCOLN	1/4 - 1/2SE	I40	39
STEWART ENTERPRISES Facility Status: Monitor	1202 S. WASHINGTON	1/4 - 1/2SE	I41	40
TOTAL #1851, WICHITA Facility Status: Monitor	1023 E LINCOLN	1/4 - 1/2SE	I42	45
TOWN & COUNTRY MKT #64 Facility Status: Closed	718 S BROADWAY	1/4 - 1/2NW	43	46
WICHITA FIRE STATION #2 Facility Status: Monitor	1240 S BROADWAY	1/4 - 1/2SW	44	47
MICHAELIS, ABANDONED FACILITY Facility Status: Closed	1128 E LINCOLN	1/4 - 1/2ESE	J45	48
AMOCO #5092, WICHITA Facility Status: Monitor	603 S BROADWAY	1/4 - 1/2NW	47	48
BUDGET RENT-A-CAR Facility Status: Closed	201 E KELLOGG	1/4 - 1/2NW	K48	49
QUIK TRIP #381 Facility Status: Monitor	220 E KELLOGG	1/4 - 1/2NW	49	49
CITY OF WICHITA Facility Status: Closed	743 S MARKET	1/4 - 1/2NW	K51	50
CAINS COFFEE CO. Facility Status: Monitor	427 S WASHINGTON	1/4 - 1/2NNE	54	57
WICHITA FIRE DEPT, PURCHASING Facility Status: Closed	500 S TOPEKA	1/4 - 1/2NNW	55	57

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
WICHITA FIRE HISTORICAL BLDG. Facility Status: Closed	1300 S. BROADWAY	1/4 - 1/2 SW	50	49
OK TRANSFER & STORAGE Facility Status: Closed	902 E ZIMMERLY	1/4 - 1/2 SSE	58	58

AOCONCERN: Kansas AOC Areas Of Concern.

A review of the AOCONCERN list, as provided by EDR, has revealed that there is 1 AOCONCERN site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
GILBERT-MOSLEY		0 - 1/8	0	8

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Health & Environment's UST (Report) Listing Including Names.

A review of the UST list, as provided by EDR, and dated 07/16/2007 has revealed that there are 7 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
TENANT (TEMPORARY) PERRY CONST	1024 S. SANTA FE	0 - 1/8 SSE	B8	11
GE APPLIANCE SERVICE SHOP	820 E. INDIANAPOLIS	1/8 - 1/4 NE	11	13
AIR CAPITOL FUEL & OIL	901 E GILBERT	1/8 - 1/4 E	C14	18
LOPER ELECTRIC CO., INC	914 E GILBERT	1/8 - 1/4 E	C17	22
REID SUPPLY COMPANY	911 E INDIANAPOLIS	1/8 - 1/4 ENE	D19	24
HEPHNER, LONNIE E.	1002 S WASHINGTON	1/8 - 1/4 E	F27	29
R-CON CORPORATION.	826 E. LINCOLN	1/8 - 1/4 SSE	H32	32

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Health & Environment's AST (Report) Listing Including Names.

A review of the AST list, as provided by EDR, and dated 07/16/2007 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

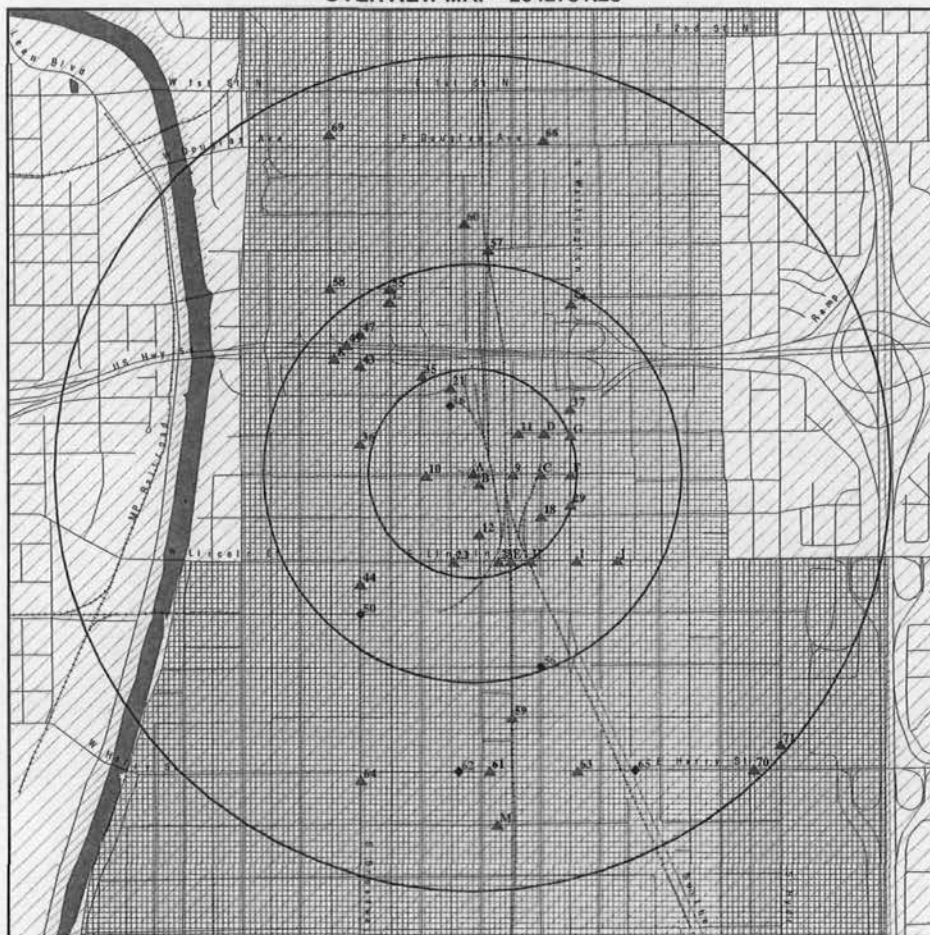
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
BOGE IRON & METAL CO., INC.	800 SO ST FRANCIS	1/8 - 1/4 NNW	21	26

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
MCCONNELL AFB	SHWS, SPILLS
CECO (4125 WEST PAWNEE, WICHITA)	SHWS
13TH & WASHINGTON, WICHITA (SEE NIC #C208770150)	SHWS
RAYTHEON AIRCRAFT CORP (SALVAGE YARD SITE) (BEECH)	SHWS
19TH & GROVE SITE	SHWS
FORMER FOOD 4 LESS	SHWS, VCP
29TH & GROVE, WICHITA	SHWS, FINDS
BARNSDALL REFINERY	SHWS
WILLIAMS NATURAL GAS - WICHITA COMP STN POND CLOS	SHWS
CHASE GASOLINE SPILL, 69TH & WEBB, WICHITA	SHWS, VCP
21ST STREET CORRIDOR BTA - #1	SHWS, BROWNFIELDS
21ST STREET CORRIDOR BTA - #4	SHWS, BROWNFIELDS
21ST STREET CORRIDOR BTA - #2	SHWS, BROWNFIELDS
BOMHOFF PROPERTY	SHWS, FINDS, VCP
ECCO INDUSTRIAL ADDITION	SHWS, VCP
CLAY DAVIS PROPERTY, WICHITA	SHWS, VCP
MCCONNELL AFB - IRP SITE ST-17	SHWS
JIM MORGAN'S FINE DRYCLEANING	SHWS
AIR CAPITOL DIAL (FORMER)	SHWS
SOUTH WASHINGTON & ENGLISH (SWE)	SHWS
WICHITA DENTAL MERCURY	CERCLIS
WASTE DISPOSAL L.L.C. TRANSFER STATION	SWF/LF
CITY OF WICHITA/CHAPIN SITE	SWF/LF
H-30 DRILLING, INC.	LUST
TRANE CO	LUST
WICHITA AIR CONDITIONING	LUST

OVERVIEW MAP - 2042731.2s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

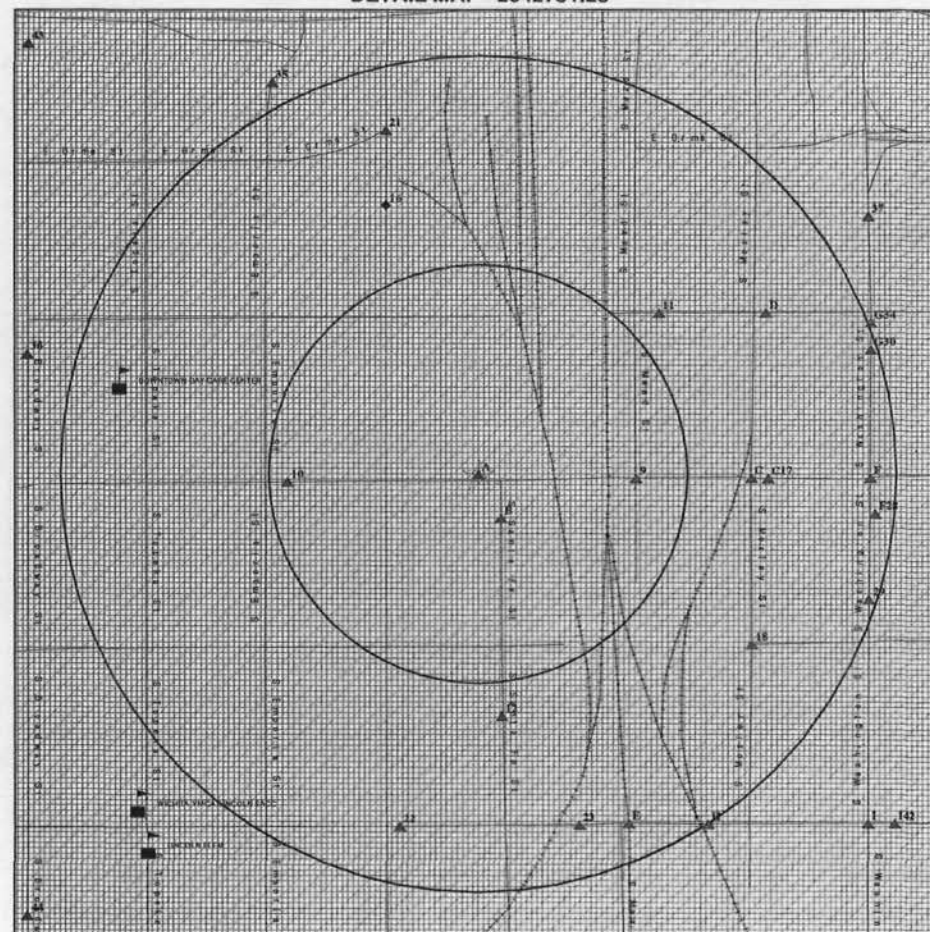
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Standard Products, Inc
ADDRESS: 650 East Gilbert Street
Wichita KS 67211
LAT/LONG: 37.6747 / 97.3306

CLIENT: SCS Engineers
CONTACT: Lindsay James
INQUIRY #: 2042731.2s
DATE: October 02, 2007 7:47 am

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DETAIL MAP - 2042731.2s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Standard Products, Inc
ADDRESS: 650 East Gilbert Street
Wichita KS 67211
LAT/LONG: 37.6747 / 97.3306

CLIENT: SCS Engineers
CONTACT: Lindsay James
INQUIRY #: 2042731.2s
DATE: October 02, 2007 7:47 am

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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL RECORDS								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
CERCLIS	X	0.500	0	0	1	NR	NR	1
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	2	9	NR	NR	NR	11
ERNS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
DOT OPS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
LIENS 2		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
STATE AND LOCAL RECORDS								
State Haz. Waste	X	1.000	1	2	2	15	NR	20
State Landfill		0.500	0	0	1	NR	NR	1
LUST		0.500	2	8	19	NR	NR	27
AOCONCERN		1.000	1	0	0	0	NR	1
UST		0.250	1	8	NR	NR	NR	7
LAST		0.500	0	0	0	NR	NR	0
AST		0.250	0	1	NR	NR	NR	1
SPILLS		TP	NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INST CONTROL								
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
BROWNFIELDS		0.500	0	0	0	NR	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
TRIBAL RECORDS								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
EDR PROPRIETARY RECORDS								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID	Direction	Distance	Distance (ft.)	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
--------	-----------	----------	----------------	-----------	------	-------------	---------------	---------------

A1 LAND TOOL COMPANY
Target 650 & 815 E GILBERT ST
Property WICHITA, KS 67211

FINDS 1008900368
110023128578

Actual: 1293 ft.

Site 1 of 4 in cluster A
FINDS:
Other Pertinent Environmental Activity Identified at Site

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

A2 LAND TOOL COMPANY
Target 650 & 815 E GILBERT ST
Property WICHITA, KS 67211

CERCLIS 1009218898
KSD984966549

Actual: 1293 ft.

Site 2 of 4 in cluster A
CERCLIS:
Site ID: 0702117
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Addressed as Part of Another non-NPL Site

CERCLIS Site Contact Name(s):
Contact Name: PAUL ROEMERMAN
Contact Tel: (913) 551-7694
Contact Title: Site Assessment Manager (SAM)

CERCLIS Site Alias Name(s):
Alias Name: GILBERT & MOSLEY
Alias Address: Not reported
KS

Site Description: HAS 2 WAREHOUSES LOCATED @ 650 E GILBERT & 815 E GILBERT. ABANDONED DRUMS, SOME DRUMS MARKED METHYLENE CHLORIDE. SITE BEING INCLUDED AS PART OF GILBERT & MOSLEY (KSD984966281).

CERCLIS Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 06/14/1988
Priority Level: Not reported

Action: REMOVAL
Date Started: 05/05/1989
Date Completed: 08/18/1989
Priority Level: Cleaned up

Action: PRELIMINARY ASSESSMENT
Date Started: 10/03/2005
Date Completed: 10/21/2005
Priority Level: Addressed as part of another non-NPL site

Map ID	Direction	Distance	Distance (ft.)	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
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A3 STANDARD PRODUCTS, INC. (FORMER)
Target 650 EAST GILBERT
Property WICHITA, KS

SHWS S108631433
N/A

Actual: 1293 ft.

Site 3 of 4 in cluster A
SHWS:
Site ID: 2233
Has Env Use Control: No
Project code: C208772288
PM Name: BENNE, R.
Site Status: Active
District Office: SCDO
Lat/Long: 37.87488 / -97.3305
River Basin: Lower Arkansas
Aquifer Yield: Equus Beds
Other Aquifers: Not reported
Parent PC: Not reported
Parent Name: Not reported
CERCLIS ID: Not reported
Discovery Date: Not reported
Depth To GW: Not reported
Depth To Bedrock: Not reported
Aquifer Yield: Not reported
GW Flow Direction: Not reported
Acres Affected: Not reported
Waste Present: False
Product Present: False
Program: Site Assessment
Lead Agency: BER - Remedial
Contaminants: Not reported
Media Act: Not reported
Media Pot: Not reported
Source: Not reported
Land Use: Not reported
Private well: Not reported
Waste Present: Not reported
Product: Not reported
Receptor Act: Not reported
Receptor Pot: Not reported
Remed Air: Not reported
Remed Soil: Not reported
Remed Water: Not reported
Remedir: Not reported
Alias: Not reported
Eucan Number: Not reported
Date: Not reported
Narrative: Sector Assessment candidate for Unified Focused Assessment, 2007-08 fiscal year.

Activity Type: Not reported
Activity Status: Not reported
Start Date: Not reported
End Date: Not reported

Map ID	Direction	Distance	Distance (ft.)	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
--------	-----------	----------	----------------	-----------	------	-------------	---------------	---------------

A4 STANDARD PRODUCTS, INC. (FORMER)
Target 650 E GILBERT ST
Property WICHITA, KS 67211

FINDS 1010152182
110030588891

Site 4 of 4 in cluster A

Actual:
1293 ft.

FINDS:

Other Pertinent Environmental Activity Identified at Site

KS-FP (Kansas - Facility Profiler) is a geographically-based data warehouse site that presents information about facilities and locations of interest to the KDHE. This site has in excess of twenty environmental interest which contains information on closed facilities, completed cleanups, and past operations as well as data on current operations and activities.

< 1/8
1 ft. GILBERT-MOSLEY
WICHITA, KS

AOCONCERN CKS0000001
N/A

AOCONCERN:

KS Areas of concern.

B5 EASTON MFG CO INC THE
88E 1023 S SANTA FE
< 1/8 WICHITA, KS 67211
155 ft.

RCRA-SQG 1000863400
FINDS KS0000107482

Site 1 of 4 in cluster B

Relative:
Higher

RCRAInfo:

Owner: EASTON MFG CO INC THE
(316) 263-4914
EPA ID: KS0000107482

Contact: Not reported

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID	Direction	Distance	Distance (ft.)	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
--------	-----------	----------	----------------	-----------	------	-------------	---------------	---------------

B6 KELLEY INSTRUMENTS, INC. (FORMER)
SSE 1024 S. SANTA FE
< 1/8 WICHITA, KS
168 ft.

SHWS S108047853
N/A

Relative:
Higher

Actual:
1296 ft.

Site 2 of 4 in cluster B

SHWS:

Site ID: 2137
Has Env Use Control: No
Project code: C208772195
PM Name: BENNE, R.
Site Status: Active
District Office: SCDO
Lat/Long: 37.67386 / -97.32893
River Basin: Lower Arkansas
Aquifer Yield: Equus Beds
Other Aquifers: Not reported
Parent PC: Not reported
Parent Name: Not reported
CERCLIS ID: Not reported
Discovery Date: 1/26/2007
Depth To GW: 21-30 feet
Depth To Bedrock: Not reported
Aquifer Yield: Not reported
GW Flow Direction: S
Acres Affected: Not reported
Waste Present: True
Product Present: False
Program: Site Assessment
Lead Agency: BER - Remedial
Contaminants: Other (see Site Narrative)
Media Act: Ground Water, Soil
Media Pot: Not reported
Source: Abandoned Facility
Land Use: Not reported
Private well: Not reported
Waste Present: Hazardous Waste
Product: Not reported
Receptor Act: Sensitive Populations
Receptor Pot: Not reported
Remed Air: Not reported
Remed Soil: Not reported
Remed Water: Not reported
Remedir: Not reported
Alias: Not reported
Eucan Number: Not reported
Date: Not reported
Narrative:

The former Kelley Instruments, Inc. (KYII) radium dial shop facility was located at 1024 (also 1004 and 1008) South Santa Fe Avenue in Sedgwick County, Kansas. The facility was in operation repairing aircraft instruments (including some with radiumdials and faces) at the licensed location from apparently as early as 1983 to as late as 1990 under the name KYII. KYII is listed in the Polk Directories for Wichita as being located within the same city block at 1004 and 1008 South Santa Fe Avenue as early as 1971 (pre-license period). The company was incorporated in 1961. KDHE's Bureau of Air and Radiation (BAR) issued a license for repair operations for radium dial instruments that were restricted to just having possession of said instruments. The license restricted the handling of radium dial instruments including the amount of time of possession to no opening the case of, or removal of any

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

KELLEY INSTRUMENTS, INC. (FORMER) (Continued)

S108047953

painted component of, or repair of a radium dial instrument. BAR granted this conditional license to KYII permitted at this location with issuance of license #25-R552-01 on November 30, 1984. A copy of a notification card for change of address is in the BAR file. The card states the date for the location change is January 8, 1990 to the present location of 4131 West May in Wichita. It is not known if a close-out survey was conducted. This UFA revealed evidence of the following Recognized Environmental Conditions in connection with the property: 1) Concentrations of radium-226 are elevated in soils from one area located generally southeast of the northern building located at 1008 South Santa Fe Avenue; 2) Arsenic and lead is present in the soil in concentrations exceeding their respective residential RSK standards at these same sample locations. However, the arsenic concentration is less than the 3X background arsenic value; 3) PCE was detected in all four ground water samples, and in all but sample #1 the concentration exceeded its MCL concentration. The UFA has revealed evidence of the following Historical Recognized Environmental Conditions (HREC) in connection with the property: 1) Radioactive material licensing was issued for operations that included having possession of radium bearing instruments. The license restricted the handling of radium dial instruments including the amount of time of possession to no opening the case of, or removal of any painted component of, or repair of a radium dial instrument. A radiological surface soil survey of the commercial complex of the former KYII facility using the Ludlum meter was conducted on March 14, 2007. The survey included the area close to the buildings, the railroad right-of-way, and soil/grass/paved areas mainly south and west of the building. One area in the eastern portion of the property had elevated readings for radiation. The highest surface reading recorded was 103 microrentgens per hour (R/hr). This survey point was on the surface of a narrow concrete ramp and was not sampled. Sample location #1 is approximately 1.5 feet east and six feet north of the high surficial radiation reading. Samples from one sampling location at two depth intervals exceeded the EPA screening level for radium-226. Sample #1 from 0.25 feet in depth had the highest concentration of radium-226 indicated at 102 pCi/g. Sample #1 from 3-4 feet in depth indicated 20.2 pCi/g of radium-226. The EPA/NRC MOU screening level for radium-226 in both residential and non-residential soils is 5 pCi/g (plus background, which for this site is approximately 0.89 pCi/g). Arsenic was detected at levels exceeding residential soil pathway RSK standards. Sample #1 collected at a depth interval of five to six feet had an arsenic concentration of 12.7 mg/Kg exceeding the arsenic residential soil pathway RSK values of 11 mg/Kg. Note that the soil 3X background arsenic value for the respective depth exceeds the fore-mentioned analytical results. From the same soil sample lead was detected at 458 mg/Kg exceeding the lead residential soil pathway RSK standard of 400 mg/Kg. PCE was indicated in all but sample #1 in concentrations exceeding its residential and nonresidential federal MCL value. RECS identified in this UFA consist of one area situated southeast of the northern building located on the commercial lot located at 1004 Santa Fe South Avenue as having radium-226 concentrations in soils exceeding EPA screening levels for radium-226. Soil samples from location #1 also exceed their respective residential RSK standards for arsenic and lead. The arsenic levels indicated, however, are below the site-specific 3X background concentration. Multiple VOCs were detected in ground water collected from the site. The site is situated within the boundaries of the Gilbert-Moseley (GM) site area where VOC concentrations are known to be elevated. PCE was indicated in all samples (except sample #1) in concentrations exceeding its residential and nonresidential federal MCL value. The PCE levels detected from the background, #2, and #3 ground water samples (0.058, 0.0077 and 0.011 mg/L, respectively) exceeded the primary MCL for PCE of 0.005 mg/L. VOC contamination in ground water is being addressed by the City of Wichita under a KDHE consent agreement

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

KELLEY INSTRUMENTS, INC. (FORMER) (Continued)

S108047953

for the GM area. The data from this study could be assimilated or used to supplement the Gilbert and Moseley project (C2-087-00175). Since the highest PCE levels were detected in the background sample, PCE releases at the KYII site appear to be attributable to the GM site. Significant levels of radium potentially attributable to radium dial repair operations appear to be present at the Kelley Instruments, Inc. site in excess of EPA/NRC screening values for surficial soil. Lead was also detected above residential RSK levels. KDHE will attempt to identify potentially responsible parties (PRPs) to participate in a state cleanup program. The site may qualify for future CERCLA remedial and removal response if a viable PRP is not identified.

Activity Type: Unified Focused Assessment (UFA)
Activity Status: U
Start Date: 1/26/2007
End Date: Not reported

B7
SSE
< 1/8
169 ft.

Relative:
Higher

Actual:
1296 ft.

PERRY & SON CONSTRUCTION
1024 S SANTA FE
WICHITA, KS 67202

Site 3 of 4 in cluster B

LUST:
Project Number: U2-087-00914
Project Name: Donald Enoch
Legal Desc Section: 28
Legal Desc Township: 27S
Legal Desc Range: 01W
Site Status: Closed
Facility ID: 29549
Initial Report Date: 4/1/1992
Release Date: Not reported

LUST S108047953
N/A

B8
SSE
< 1/8
169 ft.

Relative:
Higher

Actual:
1296 ft.

TENANT (TEMPORARY) PERRY CONST
1024 S. SANTA FE
WICHITA, KS 67211

Site 4 of 4 in cluster B

UST:
Facility ID: 29549
Tank ID: 001
Tank Type: U
Tank Status: Permanently Out Of Use
Hazards: Not reported
Petroleum Substance: Empty, Gas (incl Alcohol)
Estimated Yr in Service: 1900
Last Permit Printed: Not reported
Out of service Mo/Yr: 04/1992
Filled/Removed: Removed
Tank Empty: Not reported
Line Construction: Not reported
Facility Signed Date: 03/15/92
Owner Signed Date: 03/15/92
Facility Update Date: 03/15/92
Phone 24 Hours: 316-881-3370
Owner ID: 29549
Capacity (Gals): 1
Tank Exempt: No
NonPetroleum Substance: Not reported
Date Removed: 4/15/1992
Current Permit Printed: Not reported
QTY Remaining in Tank: 0

UST U000874541
N/A

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

TENANT (TEMPORARY) PERRY CONST (Continued)

U000874541

Marketer?: No
Contact: Donald Enoch
Facility Tel: 316-681-3370
Facility 911 Address: 1024 S SANTA FE
Facility 911 Zip: WICHITA, KS 67211
Facility District: SC
Facility Location Method: GARMIN 3 PLUS
Facility Feature: Facility Center
Facility Datum: WGS84
Owner: ENCOCH, DONALD
Owner Type: Private Or Corp.
Owner/Rep Name: Donald Enoch
Owner/Rep Title: Owner
Owner Tel: 316-681-3370
Owner Address: 5902 POLO DRIVE
Owner City, State, Zip: WICHITA, KS 67208
Owner County: SEDGWICK
Principal CERCLA Substance/Chem Abstract Service Num: Not reported

Standby?: No
Contact Title: Owner
Facility Lat/Long: 37.67400/-97.33013

8
East
< 1/8
500 ft.

MCKESSON CORPORATION
800 E GILBERT
WICHITA, KS 67211

LUST 8101833739
N/A

Relative:
Equal
Actual:
1293 ft.

LUST:
Project Number: U2-087-01084
Project Name: Mckesson Corp
Legal Desc Section: 28
Legal Desc Township: 27S
Legal Desc Range: 01E
Site Status: Closed
Facility ID: 00001
Initial Report Date: 11/13/1982
Release Date: Not reported

10
West
< 1/8
603 ft.

TRANNNY SHOP THE
518 E GILBERT
WICHITA, KS 67211

RCRA-SQG 1000825918
FINDS KSD985011543

Relative:
Higher
Actual:
1298 ft.

RCRAInfo:
Owner: JOHN NEWMAN
(316) 267-2797
EPA ID: KSD985011543
Contact: JOHN NEWMAN
(316) 267-2797
Classification: Conditionally Exempt Small Quantity Generator
TSDF Activities: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

TRANNNY SHOP THE (Continued)

1000825916

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

11
NE
1/8-1/4
765 ft.

GE APPLIANCE SERVICE SHOP
820 E. INDIANAPOLIS
WICHITA, KS

UST U000199434
N/A

Relative:
Higher
Actual:
1296 ft.

UST:
Facility ID: 00033
Tank ID: 001
Tank Type: U
Tank Status: Permanently Out Of Use
Hazards: Not reported
Petroleum Substance: Not reported
Estimated Yr In Service: 1972
Last Permit Printed: Not reported
Out of service Mo/Yr: Not reported
Filled/Removed: Removed
Tank Empty: Not reported
Line Construction: Not reported
Facility Signed Date: Not reported
Owner Signed Date: Not reported
Facility Update Date: Not reported
Phone 24 Hours: 502-452-5615
Marketer?: No
Contact: Sherman Friedman
Facility Tel: 502-452-5615
Facility 911 Address: 820 E. INDIANAPOLIS
Facility 911 Zip: WICHITA, KS
Facility District: SC
Facility Location Method: GARMIN 3 PLUS
Facility Feature: Facility Center
Facility Datum: WGS84
Owner: GENERAL ELECTRIC
Owner Type: Current
Owner/Rep Name: Not reported
Owner/Rep Title: Not reported
Owner Tel: 502-452-5615
Owner Address: APPLIANCE PARK, BLDG. 26, RM.1
Owner City, State, Zip: LOUISVILLE, KS 40225
Owner County: Not reported
Principal CERCLA Substance/Chem Abstract Service Num: Not reported

Owner ID: 00033
Capacity (Gals): 4000
Tank Exempt: No
NonPetroleum Substance: Not reported
Date Removed: Not reported
Current Permit Printed: Not reported
QTY Remaining In Tank: Not reported
Standby?: No
Contact Title: Not reported
Facility Lat/Long: 37.67644/-97.32860

Facility ID: 00033
Tank ID: 002
Tank Type: U
Owner ID: 00033
Capacity (Gals): 3000
Tank Exempt: No

GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

STANDARD PRODUCTS, INC
650 EAST GILBERT STREET
WICHITA, KS 67211

TARGET PROPERTY COORDINATES

Latitude (North): 37.67470 - 37° 40' 28.9"
Longitude (West): 97.3306 - 97° 19' 50.1"
Universal Transverse Mercator: Zone 14
UTM X (Meters): 647222.9
UTM Y (Meters): 4170829.5
Elevation: 1293 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 37097-F3 WICHITA EAST, KS
Most Recent Revision: 1982

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

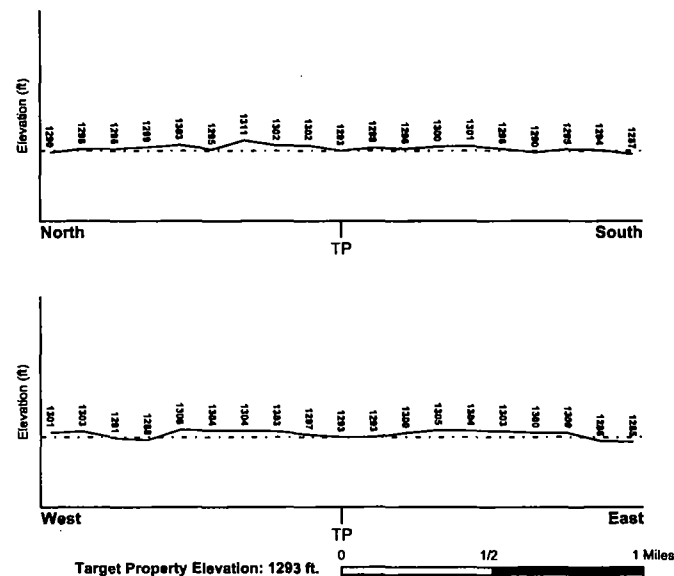
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County SEDGWICK, KS	FEMA Flood Electronic Data YES - refer to the Overview Map and Detail Map
Flood Plain Panel at Target Property:	2003280025B
Additional Panels in search area:	Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property WICHITA EAST	NWI Electronic Data Coverage Not Available
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HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION	GENERAL DIRECTION
Not Reported	FROM TP	GROUNDWATER FLOW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

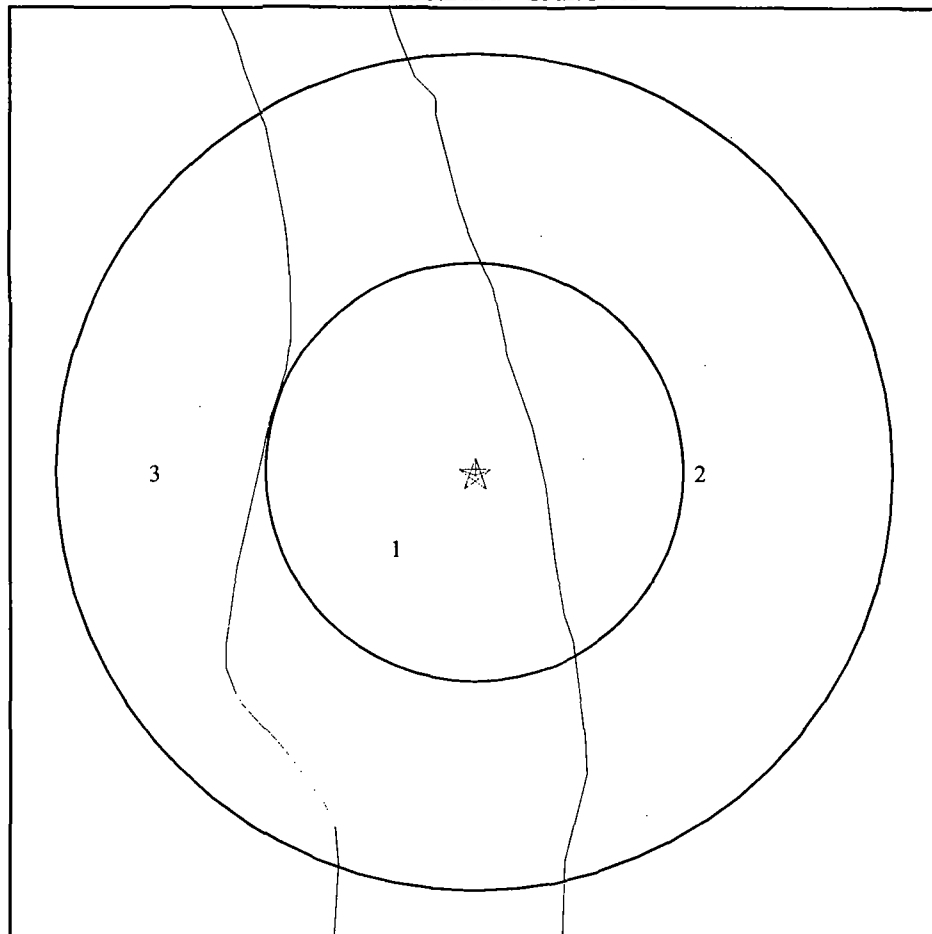
ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era:	Cenozoic	Category:	Stratified Sequence
System:	Quaternary		
Series:	Quaternary		
Code:	Q (decoded above as Era, System & Series)		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 2042731.2s



★ Target Property
 / SSURGO Soil
 / Water

SITE NAME: Standard Products, Inc
 ADDRESS: 650 East Gilbert Street
 Wichita KS 67211
 LAT/LONG: 37.6747 / 97.3306

CLIENT: SCS Engineers
 CONTACT: Lindsay James
 INQUIRY #: 2042731.2s
 DATE: October 02, 2007 7:47 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: CANADIAN

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: LOW

Depth to Bedrock Min: > 0 inches

Depth to Bedrock Max: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	20 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay, FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 2.00	Max: 7.30 Min: 5.60
2	20 inches	35 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 6.00 Min: 2.00	Max: 8.40 Min: 6.10
3	35 inches	60 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 20.00 Min: 2.00	Max: 8.40 Min: 6.10

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY**Soil Map ID: 2**

Soil Component Name: ELANDCO

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 0 inches

Depth to Bedrock Max: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	40 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 8.40 Min: 6.60
2	40 inches	60 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 8.40 Min: 7.40

Soil Map ID: 3

Soil Component Name: TABLER

Soil Surface Texture: silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained. Soils have a layer of low hydraulic conductivity, wet state high in the profile. Depth to water table is 3 to 6 feet.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 0 inches

Depth to Bedrock Max: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 8.40 Min: 5.60
2	9 inches	32 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50% or more), Fat Clay.	Max: 0.08 Min: 0.00	Max: 8.40 Min: 6.10
3	32 inches	60 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50% or more), Fat Clay.	Max: 0.06 Min: 0.00	Max: 8.40 Min: 7.40

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
--------	---------	------------------

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
BM445	USGS2729679	1/2 - 1 Mile NE
BX585	USGS2729687	1/2 - 1 Mile North
CE835	USGS2729690	1/2 - 1 Mile NNW
CE636	USGS2729689	1/2 - 1 Mile NNW
CE637	USGS2729691	1/2 - 1 Mile NNW
CE638	USGS2729688	1/2 - 1 Mile NNW
708	USGS2729675	1/2 - 1 Mile NW
CR722	USGS2729692	1/2 - 1 Mile NNW
CT781	USGS2729695	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

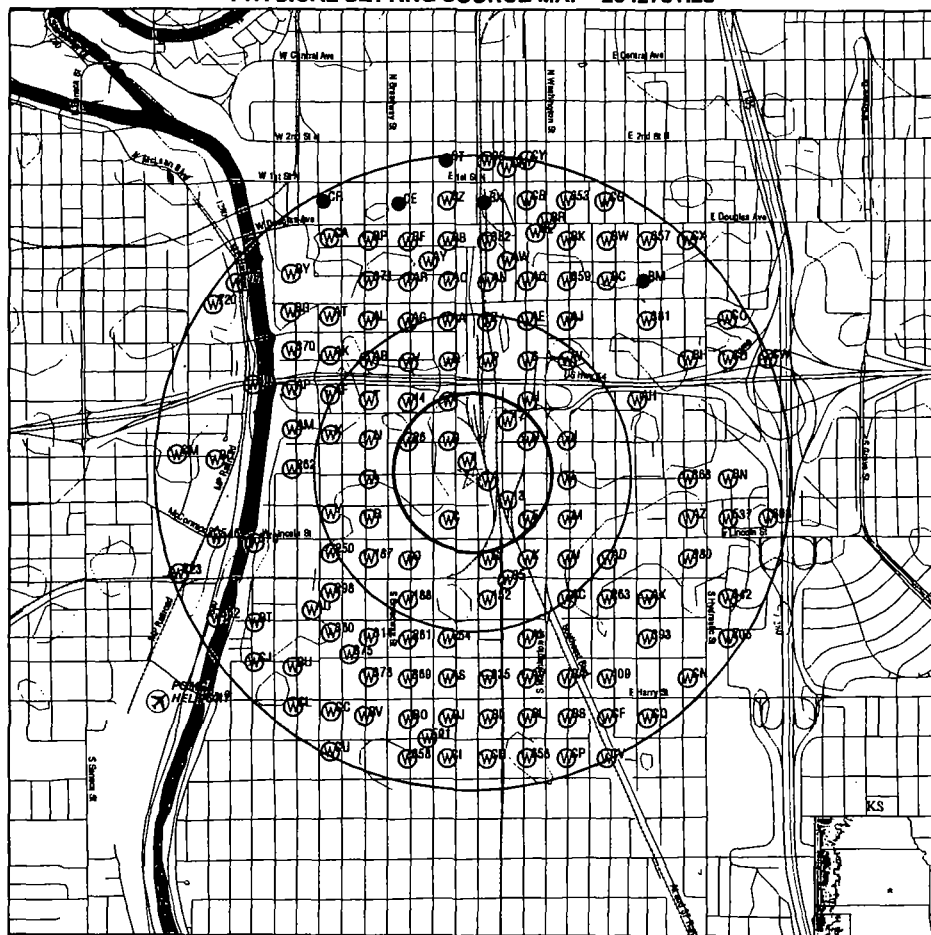
MAP ID	WELL ID	LOCATION FROM TP
1	KS3000000042745	0 - 1/8 Mile NNW
A2	KS3000000042537	0 - 1/8 Mile ESE
A3	KS3000000042536	0 - 1/8 Mile ESE
A4	KS3000000042539	0 - 1/8 Mile ESE
A5	KS3000000042538	0 - 1/8 Mile ESE
B6	KS3000000042959	1/8 - 1/4 Mile NW
B7	KS3000000042958	1/8 - 1/4 Mile NW
B8	KS3000000042957	1/8 - 1/4 Mile NW
B9	KS3000000042960	1/8 - 1/4 Mile NW
B10	KS3000000042963	1/8 - 1/4 Mile NW
B11	KS3000000042962	1/8 - 1/4 Mile NW
B12	KS3000000042961	1/8 - 1/4 Mile NW
13	KS3000000042345	1/8 - 1/4 Mile SE
C14	KS3000000042044	1/8 - 1/4 Mile SSW
C15	KS3000000042045	1/8 - 1/4 Mile SSW
C16	KS3000000042046	1/8 - 1/4 Mile SSW
17	KS3000000043256	1/8 - 1/4 Mile NE
D18	KS3000000042971	1/8 - 1/4 Mile ENE
D19	KS3000000042970	1/8 - 1/4 Mile ENE
D20	KS3000000042972	1/8 - 1/4 Mile ENE
D21	KS3000000042974	1/8 - 1/4 Mile ENE
D22	KS3000000042973	1/8 - 1/4 Mile ENE
E23	KS3000000042047	1/8 - 1/4 Mile SE
E24	KS3000000042048	1/8 - 1/4 Mile SE
E25	KS3000000042049	1/8 - 1/4 Mile SE
26	KS3000000042952	1/8 - 1/4 Mile WNW
F27	KS3000000043543	1/8 - 1/4 Mile NNW
F28	KS3000000043542	1/8 - 1/4 Mile NNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
F29	KS3000000043544	1/8 - 1/4 Mile NNW
F30	KS3000000043546	1/8 - 1/4 Mile NNW
F31	KS3000000043545	1/8 - 1/4 Mile NNW
G32	KS3000000041521	1/4 - 1/2 Mile South
G33	KS3000000041522	1/4 - 1/2 Mile South
H34	KS3000000043555	1/4 - 1/2 Mile NE
H35	KS3000000043554	1/4 - 1/2 Mile NE
H36	KS3000000043557	1/4 - 1/2 Mile NE
H37	KS3000000043556	1/4 - 1/2 Mile NE
I38	KS3000000042543	1/4 - 1/2 Mile East
I39	KS3000000042542	1/4 - 1/2 Mile East
I40	KS3000000042541	1/4 - 1/2 Mile East
I41	KS3000000042546	1/4 - 1/2 Mile East
I42	KS3000000042545	1/4 - 1/2 Mile East
I43	KS3000000042544	1/4 - 1/2 Mile East
44	KS3000000043540	1/4 - 1/2 Mile NW
J45	KS3000000042975	1/4 - 1/2 Mile ENE
J46	KS3000000042976	1/4 - 1/2 Mile ENE
K47	KS3000000041525	1/4 - 1/2 Mile SSE
K48	KS3000000041524	1/4 - 1/2 Mile SSE
K49	KS3000000041526	1/4 - 1/2 Mile SSE
K50	KS3000000041528	1/4 - 1/2 Mile SSE
K51	KS3000000041527	1/4 - 1/2 Mile SSE
L52	KS3000000042549	1/4 - 1/2 Mile West
L53	KS3000000042548	1/4 - 1/2 Mile West
L54	KS3000000042547	1/4 - 1/2 Mile West
L55	KS3000000042552	1/4 - 1/2 Mile West
L56	KS3000000042551	1/4 - 1/2 Mile West
L57	KS3000000042550	1/4 - 1/2 Mile West
M58	KS3000000042054	1/4 - 1/2 Mile ESE
M59	KS3000000042055	1/4 - 1/2 Mile ESE
M60	KS3000000042056	1/4 - 1/2 Mile ESE
M61	KS3000000042051	1/4 - 1/2 Mile ESE
M62	KS3000000042052	1/4 - 1/2 Mile ESE
M63	KS3000000042053	1/4 - 1/2 Mile ESE
M64	KS3000000042057	1/4 - 1/2 Mile ESE
M65	KS3000000042061	1/4 - 1/2 Mile ESE
M66	KS3000000042062	1/4 - 1/2 Mile ESE
M67	KS3000000042063	1/4 - 1/2 Mile ESE
M68	KS3000000042058	1/4 - 1/2 Mile ESE
M69	KS3000000042059	1/4 - 1/2 Mile ESE
M70	KS3000000042060	1/4 - 1/2 Mile ESE
N71	KS3000000042979	1/4 - 1/2 Mile WNW
N72	KS3000000042980	1/4 - 1/2 Mile WNW
N73	KS3000000042977	1/4 - 1/2 Mile WNW
N74	KS3000000042978	1/4 - 1/2 Mile WNW
N75	KS3000000042981	1/4 - 1/2 Mile WNW
N76	KS3000000042984	1/4 - 1/2 Mile WNW
N77	KS3000000042985	1/4 - 1/2 Mile WNW
N78	KS3000000042982	1/4 - 1/2 Mile WNW
N79	KS3000000042983	1/4 - 1/2 Mile WNW
O80	KS3000000041514	1/4 - 1/2 Mile SW

PHYSICAL SETTING SOURCE MAP - 2042731.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Oil, gas or related wells

SITE NAME: Standard Products, Inc
 ADDRESS: 650 East Gilbert Street
 Wichita KS 67211
 LAT/LONG: 37.6747 / 87.3306

CLIENT: SCS Engineers
 CONTACT: Lindsay James
 INQUIRY #: 2042731.2s
 DATE: October 02, 2007 7:47 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

1
 NNW
 0 - 1/8 Mile
 Higher

KS WELLS KS3000000042745

Well id: 363696
 Township: 27
 Range: 1
 Section: 28
 Longitude: -97.3308
 Owner: Cantwell, Linda
 Complete: 02-May-2005
 Other id: Not Reported
 Well depth: 50
 Static dep: 20
 Driller: Linda K Cantwell
 Direct1: 1214 Ida, Wichita
 Site id: KS3000000042745

County: Sedgwick
 Twn dir: S
 Range dir: E
 Spot: NW
 Latitude: 37.87522
 Well use: Lawn and Garden - domestic only
 Status: PLUGGED
 Dwr number: Not Reported
 Elev: Not Reported
 Est yield: Not Reported

A2
 ESE
 0 - 1/8 Mile
 Higher

KS WELLS KS3000000042537

Well id: 67217
 Township: 27
 Range: 1
 Section: 28
 Longitude: -97.32944
 Owner: City of Wichita
 Complete: 16-Dec-1991
 Other id: Not Reported
 Well depth: 24
 Static dep: Not Reported
 Driller: Geotechnical Services, Inc.
 Direct1: 815 E. GILBERT WICHITA
 Site id: KS3000000042537

County: Sedgwick
 Twn dir: S
 Range dir: E
 Spot: NWSENV
 Latitude: 37.87432
 Well use: Monitoring well/observation/piezometer
 Status: CONSTRUCTED
 Dwr number: Not Reported
 Elev: Not Reported
 Est yield: Not Reported

A3
 ESE
 0 - 1/8 Mile
 Higher

KS WELLS KS3000000042536

Well id: 67216
 Township: 27
 Range: 1
 Section: 28
 Longitude: -97.32944
 Owner: City of Wichita
 Complete: 16-Dec-1991
 Other id: Not Reported
 Well depth: 33
 Static dep: Not Reported

County: Sedgwick
 Twn dir: S
 Range dir: E
 Spot: NWSENV
 Latitude: 37.87432
 Well use: Monitoring well/observation/piezometer
 Status: CONSTRUCTED
 Dwr number: Not Reported
 Elev: Not Reported
 Est yield: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Driller: Geotechnical Services, Inc.
Direct1: 815 E GILBERT WICHITA
Site id: KS3000000042538

A4
ESE
0 - 1/8 Mile
Higher

KS WELLS KS3000000042539

Well id:	333477	County:	Sedgwick
Township:	27	Twn dir:	S
Range:	1	Range dir:	E
Section:	28	Spot:	NW SE NW
Longitude:	-97.32944	Latitude:	37.67432
Owner:	City of Wichita	Well use:	Monitoring well/observation/piezometer
Complete dat:	03-Mar-2002	Status:	CONSTRUCTED
Other id:	MW A4	Dwr number:	Not Reported
Well depth:	34	Elev:	Not Reported
Static dep:	Not Reported	Est yield:	Not Reported
Driller:	Geotechnical Services, Inc.		
Direct1:	SW of Santa Fe & Gilbert, Wichita		
Site id:	KS3000000042539		

A5
ESE
0 - 1/8 Mile
Higher

KS WELLS KS3000000042538

Well id:	329204	County:	Sedgwick
Township:	27	Twn dir:	S
Range:	1	Range dir:	E
Section:	28	Spot:	NW SE NW
Longitude:	-97.32944	Latitude:	37.67432
Owner:	City of Wichita	Well use:	Monitoring well/observation/piezometer
Complete dat:	25-Apr-2002	Status:	CONSTRUCTED
Other id:	MW 935 B	Dwr number:	Not Reported
Well depth:	21	Elev:	Not Reported
Static dep:	Not Reported	Est yield:	Not Reported
Driller:	Environmental Priority Service, Inc.		
Direct1:	from St. Francis & Gilbert: 269' E, 5' N (935B)		
Site id:	KS3000000042538		

B6
NW
1/8 - 1/4 Mile
Higher

KS WELLS KS3000000042959

Well id:	309591	County:	Sedgwick
Township:	27	Twn dir:	S
Range:	1	Range dir:	E
Section:	28	Spot:	SE NW NW
Longitude:	-97.33174	Latitude:	37.67611
Owner:	Harcros Chemicals, Inc.	Well use:	Monitoring well/observation/piezometer
Complete dat:	02-Dec-1999	Status:	CONSTRUCTED
Other id:	MW 35	Dwr number:	Not Reported
Well depth:	22	Elev:	Not Reported
Static dep:	16	Est yield:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: KS Radon

Radon Test Results

County	Total Sites	Avg. (pCi/L)	Max.	> 4.0 pCi/L
SEDGWICK	1798	3.12	85	429

Federal EPA Radon Zone for SEDGWICK County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 67211

Number of sites tested: 10

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.600 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.480 pCi/L	90%	10%	0%

Appendix C

KGS Well Data

KGS
Water Well Database Query
Township: 27S, Range: 1E, Section: 28
Save Data to File
Map Wells in This Area

155 records. Only 50 records displayed at a time--sort will affect ALL records.

View page: 1 || 2 || 3 || 4

T-R-S	Owner	Well Depth Ascend. Desc.	Static Water Level Ascend. Desc.	Est. Yield Ascend. Desc.	Well Use	Other ID	Action Taken	Completion Date Ascend. Desc.	Scan?
Sec. 28 SWNWNW	OLDEN	37 ft.	17 ft.	60 gpm.	Lawn and Garden - domestic only		Constructed	27-Jul-1985	
Sec. 28 SENWNW	WOODS	33 ft.	18 ft.	0 gpm.	Lawn and Garden - domestic only		Constructed	09-Jul-1986	
Sec. 28 NW NE SW	Walt Keeler Co., Inc.	40 ft.	17 ft.	0 gpm.	Lawn and Garden - domestic only		Constructed	25-Jun-1986	Scan
Sec. 28 SESESE	LOCAL LOAN	45 ft.	15 ft.		Monitoring well/observation/piezometer		Constructed	03-Aug-1990	
Sec. 28 SWSWSE	FORBES FIELD	28 ft.	17 ft.		Monitoring well/observation/piezometer		Constructed	19-Apr-1990	
Sec. 28 SENENW	FORBES FIELD	23 ft.	15 ft.		Monitoring well/observation/piezometer		Constructed	19-Apr-1990	
Sec. 28 SENENW	FORBES FIELD	33 ft.	14 ft.		Monitoring well/observation/piezometer		Constructed	19-Apr-1990	
Sec. 28 NENENW	FORBES FIELD	22 ft.	16 ft.		Monitoring well/observation/piezometer		Constructed	18-Apr-1990	
Sec. 28 NENENW	FORBES FIELD	36 ft.	16 ft.		Monitoring well/observation/piezometer		Constructed	18-Apr-1990	
Sec. 28 SESWNW	IRON	40 ft.	15 ft.		Injection well/air sparge (AS)/shallow		Constructed	18-Apr-1985	
Sec. 28 SESESW	FORBES FIELD	27 ft.	17 ft.		Monitoring well/observation/piezometer		Constructed	23-Apr-1990	
Sec. 28 NESESW	FORBES FIELD	29 ft.	18 ft.		Monitoring well/observation/piezometer		Constructed	20-Apr-1990	
Sec. 28 SENENW	KDHE	22 ft.	16 ft.		Monitoring well/observation/piezometer		Constructed	23-Apr-1990	
Sec. 28 SENENW	KDHE	36 ft.	16 ft.		Monitoring well/observation/piezometer		Constructed	23-Apr-1990	
Sec. 28 SWNWNW	LAUPE	28 ft.	12 ft.	15 gpm.	Domestic		Constructed	20-May-1988	
Sec. 28 NWNWNW	MID KANSAS FED	23 ft.	14 ft.		Monitoring well/observation/piezometer		Constructed	17-Aug-1990	
Sec. 28 SESENE	PRANGE	23 ft.	12 ft.	0 gpm.	Lawn and Garden - domestic only		Plugged	07-Dec-1990	
Sec. 28 NWSENW	City of Wichita	33 ft.			Monitoring well/observation/piezometer		Constructed	16-Dec-1991	
Sec. 28 NWSENW	City of Wichita	24 ft.			Monitoring well/observation/piezometer		Constructed	16-Dec-1991	
Sec. 28					Monitoring			24-Nov-	

<u>Sec. 28 NENESW</u>	CITY OF WICHITA	32 ft.	0 ft.		well/observation/piezometer	Constructed	1991
<u>Sec. 28 NENESW</u>	CITY OF WICHITA	22 ft.	0 ft.		Monitoring well/observation/piezometer	Constructed	24-Nov-1991
<u>Sec. 28 NENESE</u>	NICHOLS	32 ft.	16 ft.	0 gpm.	Lawn and Garden - domestic only	Plugged	08-Oct-1992
<u>Sec. 28 NCNCNE</u>	DAVIS	15 ft.	6 ft.	0 gpm.	Lawn and Garden - domestic only	Plugged	01-Nov-1992
<u>Sec. 28 NENWSE</u>	LEACHMAN	25 ft.	15 ft.	0 gpm.	Lawn and Garden - domestic only	Plugged	14-Apr-1993
<u>Sec. 28 SWSWNE</u>	MAI	21 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 SWSWNE</u>	MAI	21 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 SWSWNE</u>	MAI	21 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 SWSWNE</u>	MAI	20 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 SWSWNE</u>	MAI	21 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 SWSWNE</u>	MAI	20 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 NWNWSE</u>	STEWART	20 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 NWNWSE</u>	STEWART	20 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 NWNWSE</u>	STEWART	20 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 NWNWSE</u>	STEWART	20 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 NWNWSE</u>	STEWART	20 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 NWNWSE</u>	STEWART	20 ft.	12 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 NWNWSE</u>	STEWART	15 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 NWNWSE</u>	STEWART	17 ft.	13 ft.		Monitoring well/observation/piezometer	Constructed	08-Jun-1993
<u>Sec. 28 SWNWSE</u>	LACEY	29 ft.		0 gpm.	Lawn and Garden - domestic only	Constructed	01-Jul-1988
<u>Sec. 28 NWSWNE</u>	HEPHNER	20 ft.	15 ft.		Monitoring well/observation/piezometer	Constructed	24-Mar-1993
<u>Sec. 28 NWSWNE</u>	HEPHNER	20 ft.	14 ft.		Monitoring well/observation/piezometer	Constructed	24-Mar-1993
<u>Sec. 28 SESENE</u>	UNDERWOOD	26 ft.		0 gpm.	Lawn and Garden - domestic only	Constructed	18-Jun-1986
<u>Sec. 28 NWSWSW</u>	IMMANUEL BPTST	40 ft.	10 ft.	0 gpm.	Lawn and Garden - domestic only	Constructed	05-Oct-1993
<u>Sec. 28 SWNWSE</u>	ORVOM.	35 ft.	17 ft.	0 gpm.	Lawn and Garden - domestic only	Constructed	28-Mar-1994

Sec. 28 SESESE	Amoco Oil Co.	20.6 ft.	14.09 ft.	Monitoring well/observation/piezometer	Constructed	08-May-1995	
Sec. 28 NWNWSW	City of Wichita	23 ft.	15.59 ft.	Monitoring well/observation/piezometer	Constructed	07-Aug-1995	
Sec. 28 NWNWSW	City of Wichita	23 ft.	15.83 ft.	Monitoring well/observation/piezometer	Constructed	07-Aug-1995	
Sec. 28 NWNWSW	City of Wichita	22 ft.	15.89 ft.	Monitoring well/observation/piezometer	Constructed	08-Aug-1995	
Sec. 28 NWNWSW	City of Wichita	22.5 ft.	15.8 ft.	Monitoring well/observation/piezometer	Constructed	08-Aug-1995	
Sec. 28 NWNWSW	City of Wichita	22.5 ft.	15.55 ft.	Monitoring well/observation/piezometer	Constructed	07-Aug-1995	

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KGS
Hydrology

Water Well
Database
Query

Township: 27S, Range: 1E, Section: 28
 Select location of well to view details.
 Click on column heading to sort.

Save Data
to File

Map Wells
in This Area

155 records. Only 50 records displayed at a time--sort will affect ALL records.

View page: 1 2 3 4									
T-R-S	Owner	Well Depth Ascend. Desc.	Static Water Level Ascend. Desc.	Est. Yield Ascend. Desc.	Well Use	Other ID	Action Taken	Completion Date Ascend. Desc.	Scan?
Sec. 28 NWNWSW	City of Wichita	22.5 ft.	15.94 ft.		Monitoring well/observation/piezometer		Constructed	08-Aug-1995	
Sec. 28 NWNWSW	City of Wichita	22.5 ft.	15.5 ft.		Monitoring well/observation/piezometer		Constructed	08-Aug-1995	
Sec. 28 SESWNW	City of Wichita	31.5 ft.	16 ft.		Monitoring well/observation/piezometer		Constructed	09-Jul-1995	
Sec. 28 NENENW	City of Wichita	28.5 ft.	14.1 ft.		Monitoring well/observation/piezometer		Constructed	09-Jul-1995	
Sec. 28 SWNESE	WHITAKER	38 ft.	14 ft.	0 gpm.	Lawn and Garden - domestic only		Plugged	28-Aug-1995	
Sec. 28 SWSWSE	FORE	21 ft.	6.5 ft.	0 gpm.	Lawn and Garden - domestic only		Plugged	25-Oct-1995	
Sec. 28 NWNENE	HARPER	65 ft.	21 ft.	0 gpm.	Other		Constructed	12-Jan-1996	
Sec. 28 SWNESW	PIERCE	24 ft.	11 ft.		Air Conditioning		Plugged	07-Mar-1996	
Sec. 28 NWSWNE	HILLIGOS	33 ft.	16 ft.	0 gpm.	Lawn and Garden - domestic only		Plugged	12-Jul-1996	
Sec. 28 SWNWNE	PILLEY	29 ft.	17 ft.	0 gpm.	Lawn and Garden - domestic only		Plugged	14-Jun-1996	
Sec. 28 NWNWSE	Total Petroleum Inc.	21 ft.	15.56 ft.		Monitoring well/observation/piezometer		Constructed	11-Oct-1996	
Sec. 28 SWSWNE	Total Petroleum Inc.	21 ft.	15.35 ft.		Monitoring well/observation/piezometer		Constructed	11-Oct-1996	
Sec. 28 NWNWSE	Total Petroleum Inc.	21 ft.	15.71 ft.		Monitoring well/observation/piezometer		Constructed	11-Oct-1996	
Sec. 28 NWNWSE	Total Petroleum Inc.	21 ft.	15.56 ft.		Monitoring well/observation/piezometer		Constructed	11-Oct-1996	
Sec. 28 NWNWSE	Total Petroleum Inc.	21 ft.	16.18 ft.		Monitoring well/observation/piezometer		Constructed	11-Oct-1996	
Sec. 28 SWNWSE	Total Petroleum Inc.	21 ft.	15.45 ft.		Monitoring well/observation/piezometer		Constructed	11-Oct-1996	
Sec. 28 SENWSE	MULHAGEN	25 ft.	16 ft.	0 gpm.	Lawn and Garden - domestic only		Plugged	27-Dec-1996	
Sec. 28 SESESE	MCCLURG	35 ft.	12 ft.	0 gpm.	Lawn and Garden - domestic only		Plugged	04-Nov-1997	
Sec. 28 SESESE	Bill Naill	13 ft.	0 ft.		Recovery/Soil Vapor Extraction/Soil Vent	VEW 2	Constructed	11-Jan-1999	Scan

Sec. 28 SE SE SE	Bill Naill	13 ft.	0 ft.	Recovery/Soil Vapor Extraction/Soil Vent	VEW 3	Constructed	11-Jan- 1999	Scan
Sec. 28 SE SE SE	Bill Naill	13 ft.	0 ft.	Recovery/Soil Vapor Extraction/Soil Vent	VEW 1	Constructed	11-Jan- 1999	Scan
Sec. 28 SE SE NE	Curtis & Cheryl Kiekel	23 ft.	15 ft.	Lawn and Garden - domestic only		Plugged	02-Dec- 1998	Scan
Sec. 28 SW SW SW	Tim Blakely	27 ft.	13 ft.	Lawn and Garden - domestic only		Plugged	10-Mar- 1999	Scan
Sec. 28 NW NW SE	Ultramar Diamond Shamrock	14.5 ft.		Recovery/Soil Vapor Extraction/Soil Vent	SVE 1	Constructed	18-Sep- 1998	Scan
Sec. 28 NW NW SE	Kenneth Stewart	15 ft.	0 ft.	Monitoring well/observation/piezometer	MW 7B	Plugged	18-Sep- 1998	Scan
Sec. 28 NW NW SE	Kenneth Stewart	14.5 ft.		Monitoring well/observation/piezometer	SVE 2	Constructed	18-Sep- 1998	Scan
Sec. 28 NW NW SE	Kenneth Stewart	20 ft.		Monitoring well/observation/piezometer	PMW 1	Constructed	18-Sep- 1998	Scan
Sec. 28 NW NW SE	Kenneth Stewart	14.5 ft.		Monitoring well/observation/piezometer	SVE 3	Constructed	18-Sep- 1998	Scan
Sec. 28 NW NW SE	Kenneth Stewart	20 ft.		Monitoring well/observation/piezometer	PMW 3	Constructed	18-Sep- 1998	Scan
Sec. 28 SW NW SE	Kenneth Stewart	20 ft.		Monitoring well/observation/piezometer	PMW 4	Constructed	18-Sep- 1998	Scan
Sec. 28 NE NE SW	Kenneth Stewart	20 ft.		Monitoring well/observation/piezometer	PMW 2	Constructed	18-Sep- 1998	Scan
Sec. 28 NW NW SW	Broadway Christian Church	34 ft.	19 ft.	Air Conditioning		Plugged	07-Apr- 1999	Scan
Sec. 28 NE NW NW	Donlevy Lithographics, Inc.	23 ft.		Monitoring well/observation/piezometer	P 2	Constructed	16-Jun- 1999	Scan
Sec. 28 NE NW NW	Donlevy Lithographic, Inc.	23 ft.		Monitoring well/observation/piezometer	P 3	Constructed	16-Jun- 1999	Scan
Sec. 28 NE NW NW	Donlevy Lithographics, Inc.	23 ft.		Monitoring well/observation/piezometer	P 1	Constructed	16-Jun- 1999	Scan
Sec. 28 SE SW SE		20 ft.	15 ft.	Lawn and Garden - domestic only		Plugged	25-Aug- 1999	Scan
Sec. 28 NE NW NW	Chester Kappelman Group	24 ft.	12 ft.	Lawn and Garden - domestic only		Plugged	31-Aug- 1999	Scan
Sec. 28 NE NW NW	Boge Iron	35 ft.	15 ft.	Injection well/air sparge (AS)/shallow		Constructed	27-Aug- 1999	Scan

Sec. 28 NW NE SW	Mark Cox			Lawn and Garden - domestic only		Plugged	24-Jul- 1999	Scan
Sec. 28 SE NW NW	Harcros Chemicals, Inc.	22 ft.		Monitoring well/observation/piezometer	MW 2S	Constructed	02-Dec- 1999	Scan
Sec. 28 SE NW NW	Harcros Chemicals, Inc.	22 ft.	16 ft.	Monitoring well/observation/piezometer	MW 3S	Constructed	02-Dec- 1999	Scan
Sec. 28 SE NW NW	Harcros Chemicals, Inc.	32 ft.		Monitoring well/observation/piezometer	MW 1D	Constructed	02-Dec- 1999	Scan
Sec. 28 SE NW NW	Harcros Chemicals, Inc.	32 ft.		Monitoring well/observation/piezometer	MW 3D	Constructed	02-Dec- 1999	Scan
Sec. 28 SE NW NW	Harcros Chemicals, Inc.	33 ft.		Monitoring well/observation/piezometer	MW 2D	Constructed	02-Dec- 1999	Scan
Sec. 28 SE NW NW	Harcros Chemicals, Inc.	22 ft.		Monitoring well/observation/piezometer	MW 1S	Constructed	02-Dec- 1999	Scan
Sec. 28 SE SE SE	KDHE BER	21 ft.	153 ft.	Monitoring well/observation/piezometer		Constructed	27-Oct- 1999	Scan
Sec. 28 SE SE SE	KDHE-BER	39.6 ft.	13.8 ft.	Monitoring well/observation/piezometer	MW 1B	Constructed	28-Oct- 1999	Scan
Sec. 28 SE SE SE	KDHE BER	50 ft.	13 ft.	Monitoring well/observation/piezometer	MW 3C	Constructed	29-Oct- 1999	Scan
Sec. 28 SE SE SE	KDHE-BER	34.54 ft.	13.43 ft.	Monitoring well/observation/piezometer	MW 2C	Constructed	28-Oct- 1999	Scan
Sec. 28 SE SE SE	KDGE BER	21 ft.	13 ft.	Monitoring well/observation/piezometer		Constructed	28-Oct- 1999	Scan

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KGS

Water Well Database Query

Township: 27S, Range: 1E, Section: 28
Select location of well to view details.
Click on column heading to sort.

Save Data to File

Map Wells in This Area

155 records. Only 50 records displayed at a time--sort will affect ALL records.

View page: 1 2 3 4									
T-R-S	Owner	Well Depth Ascend. Desc.	Static Water Level Ascend. Desc.	Est. Yield Ascend. Desc.	Well Use	Other ID	Action Taken	Completion Date Ascend. Desc.	Scan?
Sec. 28 SE SE SE	KDHE-BER	25 ft.	14.02 ft.		Monitoring well/observation/piezometer	MW 1A	Constructed	28-Oct-1999	Scan
Sec. 28 SE SE SE	KDHE BER	38 ft.	13 ft.		Monitoring well/observation/piezometer	MW 2B	Constructed	28-Oct-1999	Scan
Sec. 28 SE SE SE	KDHE BER	24 ft.	13 ft.		Monitoring well/observation/piezometer	MW 2A	Constructed	28-Oct-1999	Scan
Sec. 28 NW NW SW	City of Wichita	22.5 ft.	17.31 ft.		Monitoring well/observation/piezometer	MW 6	Plugged	08-Mar-2000	Scan
Sec. 28 SW NW SW	Joel Assoc. Inc.	25 ft.	5 ft.		Lawn and Garden - domestic only		Plugged	20-Apr-2000	Scan
Sec. 28 SE SE NW	Larry Underhill	30 ft.	15 ft.		Lawn and Garden - domestic only		Plugged	08-Jun-2000	Scan
Sec. 28 SW NE SE	Larry Huffstetler	19 ft.	14 ft.		(unstated)/abandoned		Plugged	04-Feb-2001	Scan
Sec. 28	Larry				Lawn and Garden -			03-Feb-	

SW NE SE	Huffstetler	15 ft.	9 ft.		domestic only		Plugged	2001	Scan
Sec. 28 NE NE SW	City of Wichita	13 ft.	6 ft.		(unstated)/abandoned		Plugged	14-Jun-2001	Scan
Sec. 28 NE NE SW	City of Wichita	18 ft.	5 ft.		(unstated)/abandoned		Plugged	14-Jun-2001	Scan
Sec. 28 SE SE SE	Marjorie Fleeman	19 ft.	11 ft.		Lawn and Garden - domestic only		Plugged	14-Aug-2001	Scan
Sec. 28 SE SE SE	Marjorie & Dan Fleeman	23 ft.	12 ft.		Lawn and Garden - domestic only		Plugged	14-Aug-2001	Scan
Sec. 28 SW NW SE	Babcock, Arline	13 ft.			(unstated)/abandoned		Plugged	08-Aug-2001	Scan
Sec. 28 SW SW NE	Stephen McCormack	18.5 ft.	11 ft.		Lawn and Garden - domestic only		Plugged	15-Aug-2001	Scan
Sec. 28 SW SE SW	Grede Foundries, Inc.	35.5 ft.	5.5 ft.		Air Conditioning		Constructed	26-Aug-1975	Scan
Sec. 28 NE NE SW	City of Wichita	33 ft.			Recovery/Soil Vapor Extraction/Soil Vent	MW B1	Constructed	07-Sep-2001	Scan
Sec. 28 SE NE NW	City of Wichita	33 ft.			Recovery/Soil Vapor Extraction/Soil Vent	MW A4	Constructed	19-Sep-2001	Scan
Sec. 28 NE	City of Wichita	34 ft.	12 ft.		Recovery/Soil Vapor Extraction/Soil Vent	MW B2	Constructed	27-Aug-2001	Scan

SW SW NE	Tom Mai	23 ft.	16.32 ft.		Monitoring well/observation/piezometer	MW 8A	Constructed	11-Mar- 2003	Scan
Sec. 28 SW SW NE	Tom Mai	23-ft.	15.82 ft.		Monitoring well/observation/piezometer	MW 9A	Constructed	11-Mar- 2003	Scan
Sec. 28 SW SW NE	Tom Mai	23 ft.	15.78 ft.		Monitoring well/observation/piezometer	MW 10A	Constructed	11-Mar- 2003	Scan
Sec. 28 SW SW NE	Tom Mai	23 ft.	16.02 ft.		Monitoring well/observation/piezometer	MW 11A	Constructed	11-Mar- 2003	Scan
Sec. 28 SW NW SE	Kenneth Stewart	20 ft.	15.21 ft.		Monitoring well/observation/piezometer	MW 12B	Plugged	12-Mar- 2003	Scan
Sec. 28 SW NW SE	Kenneth Stewart	23 ft.	15.7 ft.		Monitoring well/observation/piezometer	MW 12BR	Constructed	12-Mar- 2003	Scan
Sec. 28 SW NW SE	Kenneth Stewart	23 ft.	17.76 ft.		Monitoring well/observation/piezometer	MW 13B	Constructed	12-Mar- 2003	Scan
Sec. 28 SW NW SE	Kenneth Stewart	25 ft.	16.91 ft.		Monitoring well/observation/piezometer	MW 14B	Constructed	13-Mar- 2003	Scan
Sec. 28 SW NW SE	Kenneth Stewart	25 ft.	17.92 ft.		Monitoring well/observation/piezometer	MW 15B	Constructed	13-Mar- 2003	Scan
Sec. 28 SW NW SE	Kenneth Stewart	25 ft.	19.09 ft.		Monitoring well/observation/piezometer	MW 16B	Constructed	12-Mar- 2003	Scan
Sec.									

28 NW NW SE	Mike Montague	23 ft.	19 ft.		Lawn and Garden - domestic only		Plugged	16-Aug- 2003	Scan
Sec. 28 NW SW NE	Lonnie Heplner	20 ft.			Monitoring well/observation/piezometer	MW 2	Plugged	01-Dec- 2003	Scan
Sec. 28 NW SW NE	Lonnie Heplner	20 ft.			Monitoring well/observation/piezometer	MW 10	Plugged	01-Dec- 2003	Scan

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KGS	Water Well Database Query	Township: 27S, Range: 1E, Section: 28	Save Data to File	Map Wells in This Area
Hydrology		Select location of well to view details. Click on column heading to sort.		

155 records. Only 50 records displayed at a time--sort will affect ALL records.

View page: 1 2 3 4									
T-R-S	Owner	Well Depth <u>Ascend.</u> <u>Desc.</u>	Static Water Level <u>Ascend.</u> <u>Desc.</u>	Est. Yield <u>Ascend.</u> <u>Desc.</u>	Well Use	Other ID	Action Taken	Completion Date <u>Ascend.</u> <u>Desc.</u>	Scan?
<u>Sec. 28 NW NE</u>	Lonnie Heplner	20 ft.			Monitoring well/observation/piezometer	MW 12	Plugged	01-Dec-2003	Scan
<u>Sec. 28 NW</u>	Cantwell, Linda	50 ft.	20 ft.		Lawn and Garden - domestic only		Plugged	02-May-2005	PDF
<u>Sec. 28 SE SW NW</u>	Orebaush, Mr.	36 ft.	16 ft.		Lawn and Garden - domestic only		Constructed	15-Mar-2006	PDF
<u>Sec. 28 NW NW SE</u>	Stewart, Kenneth	9.1 ft.			Recovery/Soil Vapor Extraction/Soil Vent	SVE 2	Plugged	17-Apr-2006	PDF
<u>Sec. 28 NW NW SE</u>	Stewart, Kenneth	12.61 ft.			Recovery/Soil Vapor Extraction/Soil Vent	SVE 3	Plugged	17-Apr-2006	PDF
View page: 1 2 3 4									

Appendix D

Field Notes

7/17/07 Went by Four P Equipment
Co., Inc. & procured signed
access for property from
Shane Phillips.

Onsite @ 1300.

Took background surface reading
west of property - edge in alley
area between a residence to
the N. & the Guadalupe Clinic
to the South.

≈ 13 mR/hr. Calibrated Ludlum
 ≈ 533 mR/hr. & rechecked
background = 13 mR/hr.

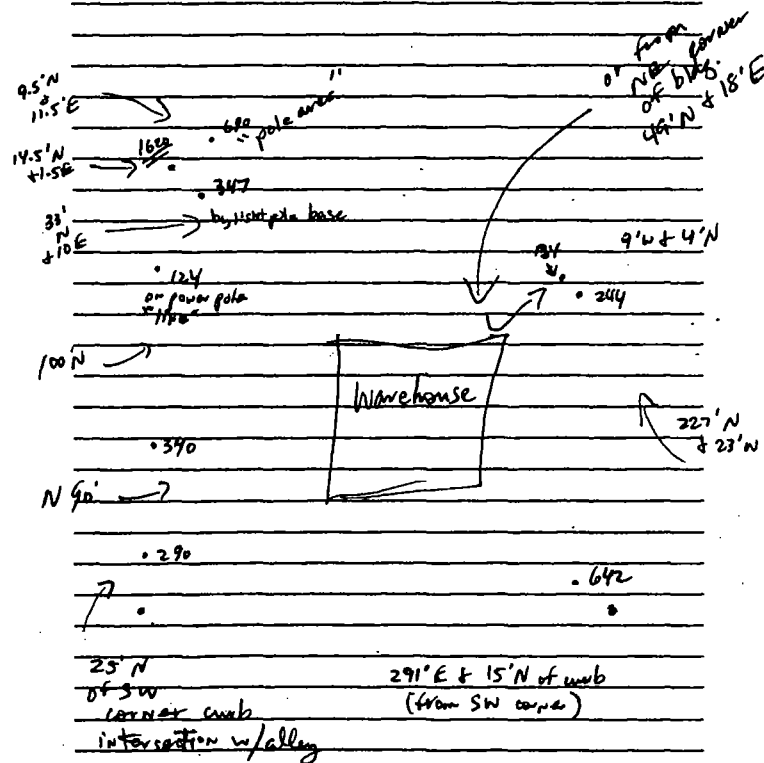
Final walkover around 15:00

Numerous "spots" over 40 mR/hr

Decided to paint high spots &
lowest areas over 100 mR/hr.

See map for readings
(= Figure 4)

units = mR/hr.



07/29/07

Calibrate Ludlum ≈ 538 mR/hr.check w/ neighbors yards for background
(n. of parking area for clinic) = 12 mR/hr.

Grid "NW" area (4 high spots)

14' E of NE corner of clinic

 $\pm 153'$ N = hot spot = 1700 mR/hr.
(was 1670)

Grid "SW" area (1 hot spot)

15' E of NE corner of clinic \pm 14.75' N = hot spot = 729 mR/hr.
(next to 340)also from NE corner 12-13' E \pm 115' Nsolo hot spot 124 mR/hr. small radius
 $< 1'$ of radiationfrom SE corner of clinic 16' E \pm 7' Nsolo hot spot 290 mR/hr. radius $\approx 1-2'$ from NE corner of warehouse 27' E \pm 39' N = 338 mR/hr. \pm 20' E \pm 44' Nfrom corner = 184 mR/hr. (was 294 \pm 134)

on SE corner area of property from E.

end of web 16' N \pm 5' Ehot spot = 522 mR/hr
(was 642)

8/01/07

dropped off material
for 4P

Cal. Ludlum = 550 mR/hr.

background ≈ 11 mR/hr. in backyard area

NW grid pts. = 18-17

expanded NW grid \pm SW grid

started SE grid to hot!

8/06/07 Calibrate Ludlum ≈ 538 mR/hr

background = 12 mR/hr.

(SE corner area by RR)

worked on SE grid expansion

08/16/07 on site at $\approx 13:00$ Calibrated Ludlum ≈ 521 mR/hr.

Site background = 12 mR/hr

Collected SPI #1 0-6" 13:10
(SE area)

Didn't get potential #2 spot
only $< 1/4 - 1/2$ " of silt & dirt
on lanceolate (S-SW of SE corner
of bldg.)

Went to N. Background area = 12 mR/hr

N. 37.67595
W - 097.33106 0-6" 13:25

SPI #4 (NW area)

0-6" #4 13:30

Bg-1 east 15 mR/hr 0-6" 13:35

N 37.67464 W-097.33054

Bg-2 west 11 mR/hr 0-6" 13:40

N. 37.67454 W-097.33099

8/20/07 XRF

Reset clock on IPAC - day & time

Standardization - OK resolution - 204

2710 High Standard

Fe 365.27	Cu 287.5	Zn 687.1
Hg 73	As 726 \pm 40	Pb 516.2 \pm 78
Ba 497.1	Cu 4325	Se 415
Ag 470	Sd 4109	

SPI	Pb	As
Bkgd	1) 159 \pm 9	< 18
0-6"	2) 169 \pm 9	< 18
13:25	3) 206 \pm 10	< 20
	Drk. Brown.	sl. clayey loam

Bg-1	1) 122 \pm 8	< 16
0-6"	2) 117 \pm 8	< 17
13:35	3) 129 \pm 8	< 16
	Drk. Brown.	sl. clayey loam

Bg-2	1) 197 \pm 10	< 20
0-6"	2) 197 \pm 10	< 20
13:40	3) 190 \pm 10	< 20
	Drk. Brown.	to Med. Brown. loam

SPI	1) 94 \pm 7	70 \pm 5
#1	2) 97 \pm 7	< 15
13:10	3) 82 \pm 7	< 14
	Med. Drk. - Med. Brown	loam w/ls. green. pieces

	PID	Ra-226
4-6'	0.0	10
	↓	10
4-8'	0.0	11
	↓	11
6-8'	0.0	10
	↓	10
	0.0	10

TD 22' 17.08 SWLF

VOCs = 11:40

Get Lox to make fiber bag #1 location

Du to #4 decide to put probe
on hot spot = 4230 mR/hr.!!!Took a 0.6" soil for #3 area
(large areally near #4)

390 mR/hr. surface 12:30

643 = in hole

	PID	Ra-226
0-2' void		
2-4' (2-3' fill looking)	10-15 mR/hr. on bag	90
12:35	0.0	6" ↓ 130 mR/hr.
	↓	3" fill like cap on clay — 4.30 mR/hr.
	0.0	(sd. & glass pieces)
		3" up from bottom (in clay) — 600 mR/hr.
4-6'	0.0	415
4-8'	↓	256
12:45	0.0	60
	4-5'	54
6-8'	0.0	52
	↓	50
	0.0	58
		55

hole from macrocone #2 (4-8') smells
sort of like sewer or musty — no VOC on PID
took soil VOC 4-5'

TD 22' SWLF = 17.66'

VOCs = 13:05

LUNCH — called city location for electric

SPT #4
13:30
0-6"

Pb	As
1) 163±9	C18
2) 122±8	L17
3) 126±9	M±6

Diff. Brown - Mel. Brown 10mm of some ls. pieces
gravel sizes & L

2710 High Standard

Fe 36656 Cu 2996 Zn 6914
Hg 106 Ag 700±40 Pb 5234±80
Ba 1041 Cr 6326 Se 15 Ag 71
Cd 111

09/05/07 onsite @ 11:00

called one call

Fiber optic - Cox

Electric - 480 volts

N. Background Cal. Ludlum = 530 uR/hr.
surface = 14 uR/hr.

Cal. PID @ 97.5

	PID	Ra-226
0-2' (6" gap)		
0-4'	0.0	12
	0.0	12
		11
2-4'	0.0	10
	↓	10
	0.0	10

SPT #2

onsite @ 14:30

8" into hole through asphalt
5.23 MR/hr.

PID

Ra-226

Depth	PID	Ra-226
0-2'	0.0	62
0-4'	0.0	38
0-1.75' void	0.0	20
2-4'	(1.75 - 2.25' = 0.2') Sample 14:40	19
	↓	16
	0.0	14
	↓	
	0.0	

Depth	PID	Ra-226
4-6'	0.0	20
	↓	17
	0.0	17
4-6'	0.0	16
6-8'	↓	18
	0.0	17
		16
		15

TD 22'

SWL = 17.80' UOC = 15:05

onsite @ 15:20

SPT #1	PID	Ra-226
0-2' (0-1' void) 1-2' fill	0.0	123
	↓	93
	0.0	38

0-4'

2-4'	0.0	26
(some brick pieces)	↓	24
	0.0	24

4-6' (void 4-5')	0.0	27
	↓	24
15:35	0.0	20

4-8'

6-8'	0.0	20
	↓	20
	0.0	21

TD 22' SWEE = 18.30'

VOCs 15:55

09/06/07

XRF

Standardization - OK resolution - 204

2700

Pb 5205 ± 82	As 697 ± 41	Cu 326
Fe 36636 ± 549	Zn 7020 ± 112	Hg 84 ± 16
Cu 2815 ± 65	Pb 1043	Cl 114 Se 15
As 674		

SPT
Background

	Pb	As
0-2'	1) 186 ± 10	< 21
	2) 218 ± 11	< 22
	3) 90 ± 7	< 15
	Dr. Brown. loam	

2-4'	1) < 15	< 10
	2) 23 ± 5	< 11
	3) < 15	13 ± 4
	Dr. Brown - Med. Brown. sl. clayey loam	

4-6'	1) < 14	< 10
	2) 29 ± 5	< 11
	3) 24 ± 5	< 11
	Tan v.f. gr. sandy loam	

6-8'	1) < 14	11 ± 3
	2) < 18	< 12
	3) < 14	< 9
	Tan - Drk. Tan sl. clayey v.f. gr. sandy loam	

Pb

As

SPT
#1
1-2'

1) 463 ± 15	21
2) 620 ± 17	44 ± 12
3) 156 ± 9	219

Dr. Brown. loam w/pieces of ls. gravel

2-4'

1) 137 ± 9	217
2) 191 ± 10	221
3) 179 ± 9	219

Dr. Brown. sl. clayey loam w/red brick fragments

5-6'

1) 26 ± 5	211
2) 30 ± 5	211
3) 103 ± 8	216

Med. Brown - Tan tinted sl. clayey loam w/
red clay

6-8'

1) 213	29
2) 17 ± 5	29
3) 213	29

Lt. Brown - Tan v.f. gr. loamy (arkosic) sand

SPT
#3
0-6"

1) 119 ± 9	218
2) 107 ± 9	218
3) 105 ± 8	217

Med. Brown - Tan v.f. gr. Sandy loam
w/ gravel pieces of ls.

Pb

As

SPT
#2
1.75-
2.25'

1) 291	254
2) 12 ± 9	218
3) 35 ± 6	213

Drk. Brown - Med. Brown. loamy clay
w/ brick (red) pieces & ls. gravel2.25-
4'

1) 214	210
2) 19 ± 6	213
3) 17 ± 5	29

4-6'

1) 19 ± 6	211
2) 100 ± 8	215
3) 26 ± 6	212

Dr. Brown. clay w/red brick detritus

6-8'

1) 18 ± 5	210
2) 15 ± 5	29
3) 214	29

Drk. Brown - Char. Brown firm clay

27p

Fe 3704 ± 564	Zn 7100 ± 113	Cu 325 ± 74
Pb 5486 ± 55	As 667 ± 42	Hg 85 ± 17
Ba 21089	Cr 2341	Ag 275
Se 215	Cl 2117	

Pb As Cd

SPI #4
2-2.75
= 2.5

1) 579 ± 20	238	798 ± 44
2) 505 ± 19	43 ± 13	958 ± 48
3) 278 ± 13	226	427 ± 39

LT. Brown - Med Tan u.f. gr. loam
w/ pieces of glass & pea or C sized
gravel (ls.)

2.50-
3'
not much
sample

1) 471 ± 18	38 ± 12	2116
2) 657 ± 22	242	182 ± 39
3) 1025 ± 28	86 ± 18	514 ± 44

Dr. Brown. w. Grayish + Tan tint sl. clayey loam

3-4'

1) 16 ± 5	210	
2) 160 ± 9	26 ± 7	
3) 15 ± 5	210	

OK w/ BRWN. Tint sl. loamy clay

4-6'

1) 87 ± 7	16 ± 5	
2) 119 ± 8	217	
3) 415	210	

OK. sl. loamy clay

6-8'

1) 267	242	
2) 416	210	
3) 215	29	

OK. sl. loamy very fine clay

12/05/07

Jess & I on site @ 10:30

Cal. PID at office (Ferrell) = 98.5

Cal. Cadlum = 550 MR/hr.

While waiting for Geoprobe & Mike
taught Jess to use kadum.

We decided new sample location
would be at hot spot close to
SE corner of Bldg. (SSW of it)

Surface readings 2 spots
on = 300-400 MR/hr & the
one the sample = 1.10 MR/hr.

took a Scrap sample = 1/4 to 1/2"
of dirt/soil/dust on concrete pad.
= SPI #5 0-6" (got about
2" deep at max.)
bagged sample = 24 MR/hr.

Mike got to site after
waiting for train.

SPI #5 $0-10' = 21 \text{ m/hr.}$ P1D $P_c = 22.6$

0-2' (0-1' void) 0.0 100 ↓ 2"

↓ 150 2" ↓

0-4' 1-2' b.s. = 188 m/hr. 0.0 120 2" ↓

↓ 70 2" ↓

2-4' 0.0 20 6" ↓

↓ 17 " "

b.s. = 11 m/hr. 0.0 15 " "

↓ 15 " " @ bottom

3" clay plug
@ top of sand

0.0

↓ 25 ↓ 2"

4-6' (6-6') 0.0 23 ↓ 6"

b.s. = 27 m/hr. 0.0 15 ↓ 6"

4-8' (upper 1.5' void) 0.0 12 ↓ 6"

↓ 12 ↓ 6"

6-8' 0.0 11 @ bottom

b.s. = 11 m/hr. 0.0

took soil VOC at 7'

TD 22' SWLT 18.32

VOC's @ 12:10 G.W. = 12 m/hr. P.B.

Ground Waters

SPI #1. BACKGROUND @ 13:30

TD 22' 17.38 SWLT

P.B. = 11 m/hr

SPI #4 @ 14:00 P.B. = 12 m/hr

TD 22' 20.61 - SWLT

reset w/ drop out screen

TD 25' 18.90 - SWLT

SPI #2 P.B. = 11 m/hr

TD 22 14.90 - SWLT

#1

SPI P.B. = 11 m/hr

TD 18.50 - SWLT

XRF

12/10/07

Standardization = OK

Resolution = 205

(45 second trial)

High Standard

Fe 38113 ± 464 Zn 7109 ± 93 Cu 2982 ± 57

Pb 5645 ± 71 As 610 ± 34 Hg 92 ± 14

Ba < 881 Cr < 274 Se < 13

Ag < 63 Cd < 97

PbAs

1) 173 ± 8

< 15

2) 192 ± 8

< 16

3) 76 ± 6

< 12

Dk. Brwn. Tannish Green v.v.f. gr. silty sand
w/ coarse pieces (sl. sized) of ls. + gtz.

1) 73 ± 16

< 30

2) 519 ± 13

29 ± 9

3) 617 ± 14

62 ± 10

Dk. Brwn. w/ less Tannish Green v.v.f. gr. silty sand
w/ sd. sized pieces of ls. + feldspar

1) 13 ± 4

< 8

2) 19 ± 4

< 8

3) 17 ± 4

< 8

Dk. Brwn. sl. clayey silty ls.

1) 19 ± 4

< 8

2) 25 ± 4

< 8

3) 38 ± 4

< 9

Tan (orangeish tint) v.f. gr. silty sd. w/ pieces
of top Dk. Brwn. malleable clay cap lam.
(see above descrip.)PbAsSPE
#5

1) 19 ± 4

< 8

2) 17 ± 4

< 7

3) 16 ± 4

< 7

Tan (orangeish tint) v.f. gr. - v.v.f. gr.
arkose sand

H.S. 2710

Fe 38396 ± 469 Zn 7263 ± 95 Cu 3113 ± 59

Pb 5685 ± 72 As 634 ± 35 Hg 98 ± 14

Ba 925 ± 303 Cr < 205 Se < 13

Ag < 63

Cd < 99

Dup.

PbAsSPE
#5
1-2'

1) 174 ± 8


25 ± 6

2) 310 ± 13

29 ± 9

3) 582 ± 15

< 29



Appendix E

Photographic Documentation

Photo # 1



Photo Date: 1/3/2007

Photographer: S. Schauer

Viewing Direction: N

Comments:

View of western portion of the property. The lot is currently used for storage of power poles, light poles and electrical construction equipment/supplies. The warehouse/shop building is a newer structure.

Photo # 2



Photo Date: 1/3/2007

Photographer: S. Schauer

Viewing Direction: NE

Comments:

Panning east from photo #1 view of building.

Photo # 3



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: E-NE

Comments:

View of SW corner area of property and bounding N-S oriented alley. Ludlum is marking a high radiation oval area in the alley (by rear tire of auto).

Photo # 4



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: E-SE

Comments:

Closeup of photo #3 showing high radiation area in alley.

Photo # 5



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: SE

Comments:

Moving north up the alley is another area of high radiation marked by the Ludlum.

Photo # 6



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: E

Comments:

Closeup of photo #5 showing an area of high radiation.

Photo # 7



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: N

Comments:

View of alley north of photo #5 area. North background sampling location is just west of alley terminus (behind tree grove north of auto).

Photo # 8



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: SE

Comments:

Another view of a high radiation spot further north up the alley. White flag marks the spot (in the shadow) just north of the power pole.

Photo # 9



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: SE

Comments:

Closeup of photo #8 showing a circular area of high radiation.

Photo # 10



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: SE

Comments:

View from further north up the alley showing a larger area of spotty radiation contamination. Note white flags by concrete light pole base and a flag by the stacked power pole terminus.

Photo # 11



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: E-NE

Comments:

Different view of photo #10 area.

Photo # 12



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: N-NE

Comments:

Another view of photo #10 area. Ludlum in bare area, white flag just NE of Ludlum, and white flag near power pole stack mark spots of high radiation.

Photo # 13



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: N-NE

Comments:

View of northern part of alley area.

Photo # 14



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: S

Comments:

View of an area NE of building showing two high radiation spots. This view shows the eastern "alley-railroad right-of-way" boundary of the property.

Photo # 15



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: N

Comments:

View of an area NE of the building showing two spots of high radiation (paint can with white flag and Ludlum with white flag mark the spots).

Photo # 16



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: NE

Comments:

SE corner area of property. White flag in front of concrete light pole base marks an oval high radiation area.

Photo # 17



Photo Date: 8/1/2007

Photographer: R. Benne

Viewing Direction: N

Comments:

Closeup of photo #16 .

Photo # 18



Photo Date: 12/5/2007

Photographer: J. Walker

Viewing Direction: NE

Comments:

View of sample location #5 near southeast corner of building. Pipewrench is sticking out of the probe hole.

Appendix F
Analytical Data



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: PT Lab Number: 497995
ATTN: Bob Benne
CURTIS SOB SUITE 410 4EM80
TOPEKA KS 66612 Site ID: 08772288
Account Code: EP
Collection Location: Standard Products, Inc., (SPI) - Bg-1 -Depth 0-6"
Collector: REB - BER Matrix: Soil Collect Depth:
Date/Time Collected: 08/16/07 13:35 Date/Time Received: 08/22/07 15:27
Sample Comments:

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum (Total)	19000	mg/Kg	09/07/07	EPA 6010
Antimony (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Arsenic (Total)	10	mg/Kg	09/07/07	EPA 6010
Barium (Total)	140	mg/Kg	09/07/07	EPA 6010
Beryllium (Total)	0.63	mg/Kg	09/07/07	EPA 6010
Boron (Total)	13	mg/Kg	09/07/07	EPA 6010
Cadmium (Total)	< 1.6	mg/Kg	09/07/07	EPA 6010
Calcium (Total)	7700	mg/Kg	09/07/07	EPA 6010
Chromium (Total)	21	mg/Kg	09/07/07	EPA 6010
Cobalt (Total)	< 6.2	mg/Kg	09/07/07	EPA 6010
Copper (Total)	39	mg/Kg	09/07/07	EPA 6010
Iron (Total)	18000	mg/Kg	09/07/07	EPA 6010
Lead (Total)	490	mg/Kg	09/07/07	EPA 6010
Magnesium (Total)	2900	mg/Kg	09/07/07	EPA 6010
Manganese (Total)	270	mg/Kg	09/07/07	EPA 6010
Mercury (Total)	< 0.050	mg/Kg	09/06/07	EPA 245.1
Molybdenum (Total)	3.3	mg/Kg	09/07/07	EPA 6010
Nickel (Total)	24	mg/Kg	09/07/07	EPA 6010
Percent Solids	91	Percent	08/27/07	EPA 1311
Potassium (Total)	4600	mg/Kg	09/07/07	EPA 6010
Selenium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Silica (Total)	2500	mg/Kg	09/07/07	EPA 6010
Silver (Total)	< 1.0	mg/Kg	09/07/07	EPA 6010
Sodium (Total)	170	mg/Kg	09/07/07	EPA 6010
Thallium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Vanadium (Total)	40	mg/Kg	09/07/07	EPA 6010
Zinc (Total)	190	mg/Kg	09/07/07	EPA 6010

Analytical Comments:
Results for total metals are expressed on a dry weight basis.

Reporting Analyst: JAB
Date Reported: 09/11/07
Copies To: File
- Not Detected at Indicated Level
* - Holding Time Exceeded

RECEIVED

SEP 13 2007

Duane R. Boline, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
CLIA # 006482

BUREAU OF
ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: PT Lab Number: 497996
ATTN: Bob Benne
CURTIS SOB SUITE 410 4EM80
TOPEKA KS 66612 Site ID: 08772288
Account Code: EP
Collection Location: Standard Products, Inc., (SPI) Bg-2 - Depth 0-6"
Collector: REB - BER Matrix: Soil Collect Depth:
Date/Time Collected: 08/16/07 13:40 Date/Time Received: 08/22/07 15:27
Sample Comments:

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum (Total)	12000	mg/Kg	09/07/07	EPA 6010
Antimony (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Arsenic (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Barium (Total)	110	mg/Kg	09/07/07	EPA 6010
Beryllium (Total)	0.36	mg/Kg	09/07/07	EPA 6010
Boron (Total)	9.4	mg/Kg	09/07/07	EPA 6010
Cadmium (Total)	7.6	mg/Kg	09/07/07	EPA 6010
Calcium (Total)	15000	mg/Kg	09/07/07	EPA 6010
Chromium (Total)	23	mg/Kg	09/07/07	EPA 6010
Cobalt (Total)	< 4.6	mg/Kg	09/07/07	EPA 6010
Copper (Total)	52	mg/Kg	09/07/07	EPA 6010
Iron (Total)	14000	mg/Kg	09/07/07	EPA 6010
Lead (Total)	180	mg/Kg	09/07/07	EPA 6010
Magnesium (Total)	2100	mg/Kg	09/07/07	EPA 6010
Manganese (Total)	220	mg/Kg	09/07/07	EPA 6010
Mercury (Total)	< 0.050	mg/Kg	09/06/07	EPA 245.1
Molybdenum (Total)	3.6	mg/Kg	09/07/07	EPA 6010
Nickel (Total)	21	mg/Kg	09/07/07	EPA 6010
Percent Solids	96	Percent	08/27/07	EPA 1311
Potassium (Total)	2800	mg/Kg	09/07/07	EPA 6010
Selenium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Silica (Total)	2100	mg/Kg	09/07/07	EPA 6010
Silver (Total)	< 1.0	mg/Kg	09/07/07	EPA 6010
Sodium (Total)	160	mg/Kg	09/07/07	EPA 6010
Thallium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Vanadium (Total)	26	mg/Kg	09/07/07	EPA 6010
Zinc (Total)	270	mg/Kg	09/07/07	EPA 6010

Analytical Comments:
Results for total metals are expressed on a dry weight basis.

Reporting Analyst: JAB
Date Reported: 09/11/07
Copies To: File
- Not Detected at Indicated Level
* - Holding Time Exceeded

RECEIVED

SEP 13 2007

Duane R. Boline, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
CLIA # 006482

BUREAU OF
ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES

Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001

REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION
ATTN: Bob Benne
CURTIS SOB SUITE 410
TOPEKA KS 66612Analysis Code: PT Lab Number: 497993
Site ID: 08772288
Account Code: EPCollection Location: Standard Products, Inc., (SPI) Background - Depth 0-6"
Collector: REB - BER Matrix: Soil Collect Depth:
Date/Time Collected: 08/16/07 13:25 Date/Time Received: 08/22/07 15:26

Sample Comments:

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum (Total)	25000	mg/Kg	09/07/07	EPA 6010
Antimony (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Arsenic (Total)	8.4	mg/Kg	09/07/07	EPA 6010
Barium (Total)	240	mg/Kg	09/07/07	EPA 6010
Beryllium (Total)	0.79	mg/Kg	09/07/07	EPA 6010
Boron (Total)	20	mg/Kg	09/07/07	EPA 6010
Cadmium (Total)	1.6	mg/Kg	09/07/07	EPA 6010
Calcium (Total)	13000	mg/Kg	09/07/07	EPA 6010
Chromium (Total)	28	mg/Kg	09/07/07	EPA 6010
Cobalt (Total)	7.6	mg/Kg	09/07/07	EPA 6010
Copper (Total)	87	mg/Kg	09/07/07	EPA 6010
Iron (Total)	20000	mg/Kg	09/07/07	EPA 6010
Lead (Total)	180	mg/Kg	09/07/07	EPA 6010
Magnesium (Total)	3900	mg/Kg	09/07/07	EPA 6010
Manganese (Total)	350	mg/Kg	09/07/07	EPA 6010
Mercury (Total)	0.065	mg/Kg	09/06/07	EPA 245.1
Molybdenum (Total)	3.9	mg/Kg	09/07/07	EPA 6010
Nickel (Total)	28	mg/Kg	09/07/07	EPA 6010
Percent Solids	88	Percent	08/27/07	EPA 1311
Potassium (Total)	5600	mg/Kg	09/07/07	EPA 6010
Selenium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Silica (Total)	2800	mg/Kg	09/07/07	EPA 6010
Silver (Total)	< 1.0	mg/Kg	09/07/07	EPA 6010
Sodium (Total)	180	mg/Kg	09/07/07	EPA 6010
Thallium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Vanadium (Total)	50	mg/Kg	09/07/07	EPA 6010
Zinc (Total)	290	mg/Kg	09/07/07	EPA 6010

Analytical Comments:

Results for total metals are expressed on a dry weight basis.

Reporting Analyst: JAB
Date Reported: 09/11/07
Copies To: File< - Not Detected at Indicated Level
* - Holding Time Exceeded

RECEIVED

SEP 13 2007

Duane R. Bollne, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
17D06

BUREAU OF

ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES

Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001

REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION
BOB BENNE
CURTIS SOB SUITE 410
TOPEKA KS 66612Analysis Code: PT Lab Number: 500025
Site ID:
Account Code: EPCollection Location: STANDARD PRODUCTS, INC = SPI BCKGRND
Collector: BOB BENNE/BER Matrix: Soil Collect Depth: 0-21
Date/Time Collected: 09/05/07 11:10 Date/Time Received: 09/27/07 16:43

Sample Comments: H2O IS FILTERED

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum (Total)	24000	mg/Kg	10/09/07	EPA 6010
Antimony (Total)	< 5.0	mg/Kg	10/09/07	EPA 6010
Arsenic (Total)	9.3	mg/Kg	10/09/07	EPA 6010
Barium (Total)	210	mg/Kg	10/09/07	EPA 6010
Beryllium (Total)	0.92	mg/Kg	10/09/07	EPA 6010
Boron (Total)	14	mg/Kg	10/09/07	EPA 6010
Cadmium (Total)	1.2	mg/Kg	10/09/07	EPA 6010
Calcium (Total)	6800	mg/Kg	10/09/07	EPA 6010
Chromium (Total)	25	mg/Kg	10/09/07	EPA 6010
Cobalt (Total)	9.2	mg/Kg	10/09/07	EPA 6010
Copper (Total)	47	mg/Kg	10/09/07	EPA 6010
Iron (Total)	23000	mg/Kg	10/09/07	EPA 6010
Lead (Total)	110	mg/Kg	10/09/07	EPA 6010
Magnesium (Total)	3700	mg/Kg	10/09/07	EPA 6010
Manganese (Total)	360	mg/Kg	10/09/07	EPA 6010
Molybdenum (Total)	2.5	mg/Kg	10/09/07	EPA 6010
Nickel (Total)	17	mg/Kg	10/09/07	EPA 6010
Percent Solids	88	Percent	10/05/07	EPA 1311
Potassium (Total)	5100	mg/Kg	10/09/07	EPA 6010
Selenium (Total)	< 5.0	mg/Kg	10/09/07	EPA 6010
Silica (Total)	3100	mg/Kg	10/09/07	EPA 6010
Silver (Total)	< 1.0	mg/Kg	10/09/07	EPA 6010
Sodium (Total)	170	mg/Kg	10/09/07	EPA 6010
Thallium (Total)	< 5.0	mg/Kg	10/09/07	EPA 6010
Vanadium (Total)	49	mg/Kg	10/09/07	EPA 6010
Zinc (Total)	180	mg/Kg	10/09/07	EPA 6010

Analytical Comments:

Results for total metals are expressed on a dry weight basis.

Reporting Analyst: JAB
Date Reported: 10/12/07
Copies To: File< - Not Detected at Indicated Level
* - Holding Time Exceeded

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OCT 16 2007

Duane R. Bollne, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
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ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: PT Lab Number: 500024
BOB BENNE
CURTIS SOB SUITE 410 4EM80
TOPEKA KS 66612 Site ID:
Account Code: EP

Collection Location: STANDARD PRODUCTS, INC = SPI BCKGRND
Collector: BOB BENNE/BER Matrix: Soil Collect Depth: 2-4'
Date/Time Collected: 09/05/07 11:10 Date/Time Received: 09/27/07 16:42

Sample Comments: H2O IS FILTERED

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Antimony (Total)	< 5.0	mg/Kg	10/09/07	EPA 6010
Arsenic (Total)	8.5	mg/Kg	10/09/07	EPA 6010
Barium (Total)	180	mg/Kg	10/09/07	EPA 6010
Beryllium (Total)	1.1	mg/Kg	10/09/07	EPA 6010
Boron (Total)	17	mg/Kg	10/09/07	EPA 6010
Cadmium (Total)	< 1.0	mg/Kg	10/09/07	EPA 6010
Calcium (Total)	5000	mg/Kg	10/09/07	EPA 6010
Chromium (Total)	28	mg/Kg	10/09/07	EPA 6010
Cobalt (Total)	9.4	mg/Kg	10/09/07	EPA 6010
Copper (Total)	20	mg/Kg	10/09/07	EPA 6010
Iron (Total)	24000	mg/Kg	10/09/07	EPA 6010
Lead (Total)	9.1	mg/Kg	10/09/07	EPA 6010
Magnesium (Total)	5200	mg/Kg	10/09/07	EPA 6010
Manganese (Total)	320	mg/Kg	10/09/07	EPA 6010
Molybdenum (Total)	2.7	mg/Kg	10/09/07	EPA 6010
Nickel (Total)	16	mg/Kg	10/09/07	EPA 6010
Percent Solids	85	Percent	10/05/07	EPA 1311
Potassium (Total)	6000	mg/Kg	10/09/07	EPA 6010
Selenium (Total)	< 5.0	mg/Kg	10/09/07	EPA 6010
Silica (Total)	3500	mg/Kg	10/09/07	EPA 6010
Silver (Total)	< 1.0	mg/Kg	10/09/07	EPA 6010
Sodium (Total)	160	mg/Kg	10/09/07	EPA 6010
Thallium (Total)	< 5.0	mg/Kg	10/09/07	EPA 6010
Vanadium (Total)	64	mg/Kg	10/09/07	EPA 6010
Zinc (Total)	70	mg/Kg	10/09/07	EPA 6010

Analytical Comments:

Results for total metals are expressed on a dry weight basis.

Reporting Analyst: JAB
Date Reported: 10/12/07
Copies To: File

< - Not Detected at Indicated Level
* - Holding Time Exceeded

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Laboratory Fax - (785) 296-1641
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DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: PT Lab Number: 500023
BOB BENNE
CURTIS SOB SUITE 410 4EM80
TOPEKA KS 66612 Site ID:
Account Code: EP

Collection Location: STANDARD PRODUCTS, INC = SPI BCKGRND
Collector: BOB BENNE/BER Matrix: Soil Collect Depth: 4-6
Date/Time Collected: 09/05/07 11:20 Date/Time Received: 09/27/07 16:41

Sample Comments: H2O IS FILTERED

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum (Total)	21000	mg/Kg	10/09/07	EPA 6010
Antimony (Total)	< 5.0	mg/Kg	10/09/07	EPA 6010
Arsenic (Total)	6.8	mg/Kg	10/09/07	EPA 6010
Barium (Total)	150	mg/Kg	10/09/07	EPA 6010
Beryllium (Total)	0.60	mg/Kg	10/09/07	EPA 6010
Boron (Total)	11	mg/Kg	10/09/07	EPA 6010
Cadmium (Total)	< 1.0	mg/Kg	10/09/07	EPA 6010
Calcium (Total)	10000	mg/Kg	10/09/07	EPA 6010
Chromium (Total)	21	mg/Kg	10/09/07	EPA 6010
Cobalt (Total)	6.1	mg/Kg	10/09/07	EPA 6010
Copper (Total)	11	mg/Kg	10/09/07	EPA 6010
Iron (Total)	16000	mg/Kg	10/09/07	EPA 6010
Lead (Total)	5.4	mg/Kg	10/09/07	EPA 6010
Magnesium (Total)	3700	mg/Kg	10/09/07	EPA 6010
Manganese (Total)	190	mg/Kg	10/09/07	EPA 6010
Molybdenum (Total)	2.2	mg/Kg	10/09/07	EPA 6010
Nickel (Total)	11	mg/Kg	10/09/07	EPA 6010
Percent Solids	91	Percent	10/05/07	EPA 1311
Potassium (Total)	3900	mg/Kg	10/09/07	EPA 6010
Selenium (Total)	< 5.0	mg/Kg	10/09/07	EPA 6010
Silica (Total)	2600	mg/Kg	10/09/07	EPA 6010
Silver (Total)	< 1.0	mg/Kg	10/09/07	EPA 6010
Sodium (Total)	200	mg/Kg	10/09/07	EPA 6010
Thallium (Total)	< 5.0	mg/Kg	10/09/07	EPA 6010
Vanadium (Total)	45	mg/Kg	10/09/07	EPA 6010
Zinc (Total)	46	mg/Kg	10/09/07	EPA 6010

Analytical Comments:

Results for total metals are expressed on a dry weight basis.

Reporting Analyst: JAB
Date Reported: 10/12/07
Copies To: File

< - Not Detected at Indicated Level
* - Holding Time Exceeded

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Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
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DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV. REMEDIATION Analysis Code: PT Lab Number: 497997
ATTN: Bob Benne
CURTIS SOB SUITE 410 Site ID: 08772288
TOPEKA KS 66612 Account Code: EP

Collection Location: Standard Products, Inc., (SP1) - #1 - Depth 0-6"
Collector: REB - BGR Matrix: Soil Collect Depth:
Date/Time Collected: 08/16/07 13:10 Date/Time Received: 08/22/07 15:27

Sample Comments:

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum (Total)	8600	mg/Kg	09/07/07	EPA 6010
Antimony (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Arsenic (Total)	5.9	mg/Kg	09/07/07	EPA 6010
Barium (Total)	99	mg/Kg	09/07/07	EPA 6010
Beryllium (Total)	0.37	mg/Kg	09/07/07	EPA 6010
Boron (Total)	7.3	mg/Kg	09/07/07	EPA 6010
Cadmium (Total)	1.8	mg/Kg	09/07/07	EPA 6010
Calcium (Total)	37000	mg/Kg	09/07/07	EPA 6010
Chromium (Total)	24	mg/Kg	09/07/07	EPA 6010
Cobalt (Total)	4.1	mg/Kg	09/07/07	EPA 6010
Copper (Total)	56	mg/Kg	09/07/07	EPA 6010
Iron (Total)	12000	mg/Kg	09/07/07	EPA 6010
Lead (Total)	65	mg/Kg	09/07/07	EPA 6010
Magnesium (Total)	3800	mg/Kg	09/07/07	EPA 6010
Manganese (Total)	230	mg/Kg	09/07/07	EPA 6010
Mercury (Total)	< 0.050	mg/Kg	09/06/07	EPA 245.1
Molybdenum (Total)	10	mg/Kg	09/07/07	EPA 6010
Nickel (Total)	32	mg/Kg	09/07/07	EPA 6010
Percent Solids	97	Percent	08/27/07	EPA 1311
Potassium (Total)	1800	mg/Kg	09/07/07	EPA 6010
Selenium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Silica (Total)	2300	mg/Kg	09/07/07	EPA 6010
Silver (Total)	< 1.0	mg/Kg	09/07/07	EPA 6010
Sodium (Total)	200	mg/Kg	09/07/07	EPA 6010
Thallium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Vanadium (Total)	19	mg/Kg	09/07/07	EPA 6010
Zinc (Total)	220	mg/Kg	09/07/07	EPA 6010

Analytical Comments:

Results for total metals are expressed on a dry weight basis.

Reporting Analyst: JAB
Date Reported: 09/11/07
Copies To: File

< - Not Detected at Indicated Level
* - Holding Time Exceeded

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Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641

BUREAU OF
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TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #1 1-2'

TOTAL Metals

Lot-Sample #....: P8A070103-001
Date Sampled....: 09/05/07 15:25 Date Received...: 01/05/08
% Moisture.....: 0.20

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 8011063						
Mercury	122	33.4	ug/kg	SW846 7471A	01/11/08	KE5H31AK
	0.122	Dilution Factor: 1		Analysis Time...: 11:56		
Prep Batch #....: 8011076						
Silver	ND	5.0	mg/kg	SW846 6010B	01/11/08	KE5H31AH
		Dilution Factor: 5		Analysis Time...: 21:17		
Arsenic	11.9	5.0	mg/kg	SW846 6010B	01/11-01/14/08	KE5H31AC
		Dilution Factor: 5		Analysis Time...: 23:46		
Barium	154	25.1	mg/kg	SW846 6010B	01/11-01/14/08	KE5H31AD
		Dilution Factor: 5		Analysis Time...: 23:46		
Cadmium	7.1	2.5	mg/kg	SW846 6010B	01/11-01/14/08	KE5H31AE
		Dilution Factor: 5		Analysis Time...: 23:46		
Chromium	16.1	5.0	mg/kg	SW846 6010B	01/11-01/14/08	KE5H31AJ
		Dilution Factor: 5		Analysis Time...: 23:46		
Lead	458	5.0	mg/kg	SW846 6010B	01/11-01/14/08	KE5H31AF
		Dilution Factor: 5		Analysis Time...: 23:46		
Selenium	ND	7.5	mg/kg	SW846 6010B	01/11-01/14/08	KE5H31AG
		Dilution Factor: 5		Analysis Time...: 23:46		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #1 1-2'

General Chemistry

Lot-Sample #....: F8A070103-001 Work Order #....: KES5H3 Matrix.....: SOLID
Date Sampled....: 09/05/07 15:25 Date Received...: 01/05/08
% Moisture.....: 0.20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	0.20	0.10	%	MCANN 160.3 MOD	01/07-01/08/08	8007042
		Dilution Factor: 1		Analysis Time...: 00:00		

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #2 0-2'

TOTAL Metals

Lot-Sample #....: F8A070103-002 Matrix.....: SOLID
Date Sampled....: 09/05/07 14:40 Date Received...: 01/05/08
% Moisture.....: 0.76

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 8011063						
Mercury	73.2	33.6	ug/kg	SW846 7471A	01/11/08	KESJMI1AK
	0.0732					
				Dilution Factor: 1	Analysis Time...: 12:11	
Prep Batch #....: 8011076						
Silver	ND	2.0	mg/kg	SW846 6010B	01/11/08	KESJMI1AH
				Dilution Factor: 2	Analysis Time...: 21:39	
Arsenic	6.4	2.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJMI1AC
				Dilution Factor: 2	Analysis Time...: 23:08	
Barium	113	10.1	mg/kg	SW846 6010B	01/11-01/14/08	KESJMI1AD
				Dilution Factor: 2	Analysis Time...: 23:08	
Cadmium	1.0	1.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJMI1AE
				Dilution Factor: 2	Analysis Time...: 23:08	
Chromium	8.6	2.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJMI1AF
				Dilution Factor: 2	Analysis Time...: 23:08	
Lead	157	2.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJMI1AG
				Dilution Factor: 2	Analysis Time...: 23:08	
Selenium	ND	3.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJMI1AG
				Dilution Factor: 2	Analysis Time...: 23:08	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #2 0-2'

General Chemistry

Lot-Sample #...: F8A070103-002 Work Order #...: KESJM Matrix.....: SOLID
Date Sampled...: 09/05/07 14:40 Date Received...: 01/05/08
% Moisture.....: 0.76

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	0.76	0.10	%	HCANN 160.3 MOD	01/07-01/08/08	8007042
		Dilution Factor: 1		Analysis Time...: 00:00		

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #3 0-6'

TOTAL Metals

Lot-Sample #...: F8A070103-003 Matrix.....: SOLID
Date Sampled...: 09/05/07 12:30 Date Received...: 01/05/08
% Moisture.....: 0.090

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8011063						
Mercury	63.1	33.3	ug/kg	SW846 7471A	01/11/08	KESJ81AK
	0.0631			Dilution Factor: 1	Analysis Time...: 12:14	
Prep Batch #...: 8011076						
Silver	ND	2.0	mg/kg	SW846 6010B	01/11/08	KESJ81AH
				Dilution Factor: 2	Analysis Time...: 21:45	
Arsenic	3.8	2.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJ81AC
				Dilution Factor: 2	Analysis Time...: 23:13	
Barium	82.2	10.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJ81AD
				Dilution Factor: 2	Analysis Time...: 23:13	
Cadmium	1.1	1.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJ81AE
				Dilution Factor: 2	Analysis Time...: 23:13	
Chromium	10.5	2.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJ81AJ
				Dilution Factor: 2	Analysis Time...: 23:13	
Lead	113	2.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJ81AF
				Dilution Factor: 2	Analysis Time...: 23:13	
Selenium	ND	3.0	mg/kg	SW846 6010B	01/11-01/14/08	KESJ81AG
				Dilution Factor: 2	Analysis Time...: 23:13	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #3 0-6'

General Chemistry

Lot-Sample #...: F8A070103-003 Work Order #...: KHSJ8 Matrix.....: SOLID
Date Sampled...: 09/05/07 12:30 Date Received...: 01/05/08
% Moisture.....: 0.090

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	0.090 E	0.10	%	NCMWW 160.3 MOD	01/07-01/08/08	8007042
		Dilution Factor: 1		Analysis Time...: 00:00		

NOTE(S):

RL Reporting Limit

E Estimated result. Result is less than RL.



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: PT Lab Number: 497994
ATTN: Bob Benne
CURTIS SOB SUITE 410
TOPEKA KS 66612
Site ID: 08772288
Account Code: EP
Collection Location: Standard Products, Inc., (SPI) - #4 -Depth 0-6"
Collector: REB - BER Matrix: Soil Collect Depth:
Date/Time Collected: 08/16/07 13:30 Date/Time Received: 08/22/07 15:26
Sample Comments:

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum (Total)	6000	mg/Kg	09/07/07	EPA 6010
Antimony (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Arsenic (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Barium (Total)	96	mg/Kg	09/07/07	EPA 6010
Beryllium (Total)	0.25	mg/Kg	09/07/07	EPA 6010
Boron (Total)	13	mg/Kg	09/07/07	EPA 6010
Cadmium (Total)	1.3	mg/Kg	09/07/07	EPA 6010
Calcium (Total)	53000	mg/Kg	09/07/07	EPA 6010
Chromium (Total)	11	mg/Kg	09/07/07	EPA 6010
Cobalt (Total)	2.8	mg/Kg	09/07/07	EPA 6010
Copper (Total)	64	mg/Kg	09/07/07	EPA 6010
Iron (Total)	10000	mg/Kg	09/07/07	EPA 6010
Lead (Total)	91	mg/Kg	09/07/07	EPA 6010
Magnesium (Total)	2000	mg/Kg	09/07/07	EPA 6010
Manganese (Total)	150	mg/Kg	09/07/07	EPA 6010
Mercury (Total)	0.071	mg/Kg	09/06/07	EPA 245.1
Molybdenum (Total)	3.0	mg/Kg	09/07/07	EPA 6010
Nickel (Total)	17	mg/Kg	09/07/07	EPA 6010
Percent Solids	96	Percent	08/27/07	EPA 1311
Potassium (Total)	1700	mg/Kg	09/07/07	EPA 6010
Selenium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Silica (Total)	1600	mg/Kg	09/07/07	EPA 6010
Silver (Total)	< 1.0	mg/Kg	09/07/07	EPA 6010
Sodium (Total)	430	mg/Kg	09/07/07	EPA 6010
Thallium (Total)	< 5.0	mg/Kg	09/07/07	EPA 6010
Vanadium (Total)	16	mg/Kg	09/07/07	EPA 6010
Zinc (Total)	170	mg/Kg	09/07/07	EPA 6010

Analytical Comments:

Results for total metals are expressed on a dry weight basis.

Reporting Analyst: JAB
Date Reported: 09/11/07
Copies To: File

< - Not Detected at Indicated Level
* - Holding Time Exceeded

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Duane R. Bollne, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
CLIA # 648254

BUREAU OF
ENVIRONMENTAL REMEDIATION

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #4 2-2.5'

TOTAL Metals

Lot-Sample #...: F8A070103-004

Date Sampled...: 09/05/07 12:35 Date Received...: 01/05/08

% Moisture...: 0.20

Matrix...: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8011063						
Mercury	149	33.4	ug/kg	SW846 7471A	01/11/08	KE5KA1AK
	0.149			Dilution Factor: 1	Analysis Time...: 12:16	
Prep Batch #...: 8011076						
Silver	ND	2.0	mg/kg	SW846 6010B	01/11/08	KE5KALAH
				Dilution Factor: 2	Analysis Time...: 21:50	
Arsenic	4.5 B	5.0	mg/kg	SW846 6010B	01/11-01/14/08	KE5KA1AC
				Dilution Factor: 5	Analysis Time...: 23:19	
Barium	75.2	25.1	mg/kg	SW846 6010B	01/11-01/14/08	KE5KALAD
				Dilution Factor: 5	Analysis Time...: 23:19	
Cadmium	806	1.0	mg/kg	SW846 6010B	01/11-01/15/08	KE5KALAE
				Dilution Factor: 2	Analysis Time...: 00:08	
Chromium	21.0	5.0	mg/kg	SW846 6010B	01/11-01/14/08	KE5KALAJ
				Dilution Factor: 5	Analysis Time...: 23:19	
Lead	477	2.0	mg/kg	SW846 6010B	01/11-01/15/08	KE5KALAF
				Dilution Factor: 2	Analysis Time...: 00:08	
Selenium	ND	3.0	mg/kg	SW846 6010B	01/11-01/15/08	KE5KALAG
				Dilution Factor: 2	Analysis Time...: 00:08	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #4 2-2.5'

General Chemistry

Lot-Sample #...: F8A070103-004

Work Order #...: KE5KA

Matrix...: SOLID

Date Sampled...: 09/05/07 12:35 Date Received...: 01/05/08

% Moisture...: 0.20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	0.20	0.10	%	NCANN 160.3 MOD	01/07-01/08/08	8007042
				Dilution Factor: 1	Analysis Time...: 00:00	

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #4 2.5-2.75'

TOTAL Metals

Lot-Sample #....: F8A070103-005
 Date Sampled....: 09/05/07 12:35 Date Received...: 01/05/08
 % Moisture.....: 0.22

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8011063						
Mercury	202	33.4	ng/kg	SW846 7471A	01/11/08	KR5KD1AK
		Dilution Factor: 1		Analysis Time...: 12:18		
	0.202					
Prep Batch #...: 8011076						
Silver	ND	2.0	mg/kg	SW846 6010B	01/11/08	KR5KD1AH
		Dilution Factor: 2		Analysis Time...: 21:55		
Arsenic	15.4	10.0	mg/kg	SW846 6010B	01/11-01/14/08	KR5KD1AC
		Dilution Factor: 10		Analysis Time...: 23:24		
Barium	290	50.1	mg/kg	SW846 6010B	01/11-01/14/08	KR5KD1AD
		Dilution Factor: 10		Analysis Time...: 23:24		
Cadmium	353	1.0	mg/kg	SW846 6010B	01/11-01/15/08	KR5KD1AE
		Dilution Factor: 2		Analysis Time...: 00:13		
Chromium	31.4	10.0	mg/kg	SW846 6010B	01/11-01/14/08	KR5KD1AJ
		Dilution Factor: 10		Analysis Time...: 23:24		
Lead	1340	2.0	mg/kg	SW846 6010B	01/11-01/15/08	KR5KD1AF
		Dilution Factor: 2		Analysis Time...: 00:13		
Selenium	1.4 B	3.0	mg/kg	SW846 6010B	01/11-01/15/08	KR5KD1AG
		Dilution Factor: 2		Analysis Time...: 00:13		

NOTE(s):

Results and reporting limits have been adjusted for dry weight.
 B Estimated result. Result is less than RL.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #4 2.5-2.75'

General Chemistry

Lot-Sample #....: F8A070103-005 Work Order #....: KR5KD
 Date Sampled....: 09/05/07 12:35 Date Received...: 01/05/08
 % Moisture.....: 0.22

Matrix.....: SOLID

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	0.22	0.10	%	MCANW 160.3 MOD	01/07-01/08/08	8007042
		Dilution Factor: 1		Analysis Time...: 00:00		

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #4 3-4'

TOTAL Metals

Lot-Sample #...: F8A070103-006
Date Sampled...: 09/05/07 12:35 Date Received...: 01/05/08
% Moisture.....: 0.81

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8011063						
Mercury	93.4	33.6	ug/kg	SW846 7471A	01/11/08	KRSKE1AK
		Dilution Factor: 1		Analysis Time...: 12:21		
	0.0934					
Prep Batch #...: 8011076						
Silver	ND	2.0	mg/kg	SW846 6010B	01/11/08	KRSKE1AH
		Dilution Factor: 2		Analysis Time...: 22:01		
Arsenic	11.0	2.0	mg/kg	SW846 6010B	01/11-01/15/08	KRSKE1AC
		Dilution Factor: 2		Analysis Time...: 00:19		
Barium	176	10.1	mg/kg	SW846 6010B	01/11-01/15/08	KRSKE1AD
		Dilution Factor: 2		Analysis Time...: 00:19		
Cadmium	4.6	1.0	mg/kg	SW846 6010B	01/11-01/15/08	KRSKE1AE
		Dilution Factor: 2		Analysis Time...: 00:19		
Chromium	12.2	2.0	mg/kg	SW846 6010B	01/11-01/15/08	KRSKE1AF
		Dilution Factor: 2		Analysis Time...: 00:19		
Lead	185	2.0	mg/kg	SW846 6010B	01/11-01/15/08	KRSKE1AF
		Dilution Factor: 2		Analysis Time...: 00:19		
Selenium	1.1 B	3.0	mg/kg	SW846 6010B	01/11-01/15/08	KRSKE1AG
		Dilution Factor: 2		Analysis Time...: 00:19		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.
B Estimated result. Result is less than RL.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #4 3-4'

General Chemistry

Lot-Sample #...: F8A070103-006 Work Order #...: KR5KE Matrix.....: SOLID
Date Sampled...: 09/05/07 12:35 Date Received...: 01/05/08
% Moisture.....: 0.81

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	0.81	0.10	%	NCMHW 160.3 MOD	01/07-01/08/08	8007042
		Dilution Factor: 1		Analysis Time...: 00:00		

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #5 0-6"

TOTAL Metals

Lot-Sample #....: F7L110245-001

Date Sampled....: 12/05/07 11:15 Date Received...: 12/11/07

% Moisture.....: 3.3

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7348076						
Mercury	96.7	34.4	ug/kg	SW846 7471A	12/14/07	KDW4H1AJ
		Dilution Factor: 1		Analysis Time...: 12:03		
Prep Batch #....: 7351089						
Silver	ND	2.1	mg/kg	SW846 6010B	12/17-12/19/07	KDW4H1AG
		Dilution Factor: 2		Analysis Time...: 09:03		
Arsenic	2.9	2.1	mg/kg	SW846 6010B	12/17-12/19/07	KDW4H1AA
		Dilution Factor: 2		Analysis Time...: 09:03		
Barium	96.0	10.3	mg/kg	SW846 6010B	12/17-12/19/07	KDW4H1AC
		Dilution Factor: 2		Analysis Time...: 09:03		
Cadmium	1.6	1.0	mg/kg	SW846 6010B	12/17-12/19/07	KDW4H1AD
		Dilution Factor: 2		Analysis Time...: 09:03		
Chromium	10.7	2.1	mg/kg	SW846 6010B	12/17-12/19/07	KDW4H1AE
		Dilution Factor: 2		Analysis Time...: 09:03		
Lead	175	2.1	ug/kg	SW846 6010B	12/17-12/19/07	KDW4H1AF
		Dilution Factor: 2		Analysis Time...: 09:03		
Selenium	ND	3.1	mg/kg	SW846 6010B	12/17-12/19/07	KDW4H1AF
		Dilution Factor: 2		Analysis Time...: 09:03		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #5 0-6"

General Chemistry

Lot-Sample #....: F7L110245-001

Work Order #....: KDW4H

Matrix.....: SOLID

Date Sampled....: 12/05/07 11:15 Date Received...: 12/11/07

% Moisture.....: 3.3

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	3.3	0.10	%	NCMHW 160.3 MOD	12/12-12/13/07	7346047
		Dilution Factor: 1		Analysis Time...: 00:00		

TestAmerica St. Louis

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #5 1-2'

TOTAL Metals

Lot-Sample #....: F7L110245-002

Date Sampled....: 12/05/07 11:25 Date Received...: 12/11/07

% Moisture.....: 17

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7348076						
Mercury	278	40.0	ug/kg	SW846 7471A	12/14/07	KDW4V1AJ
		Dilution Factor: 1		Analysis Time...: 12:05		
Prep Batch #....: 7351089						
Silver	18.0	6.0	mg/kg	SW846 6010B	12/17-12/19/07	KDW4V1AG
		Dilution Factor: 5		Analysis Time...: 09:35		
Arsenic	16.0	6.0	mg/kg	SW846 6010B	12/17-12/19/07	KDW4V1AA
		Dilution Factor: 5		Analysis Time...: 09:35		
Barium	228	30.0	mg/kg	SW846 6010B	12/17-12/19/07	KDW4V1AC
		Dilution Factor: 5		Analysis Time...: 09:35		
Cadmium	9.2	3.0	mg/kg	SW846 6010B	12/17-12/19/07	KDW4V1AD
		Dilution Factor: 5		Analysis Time...: 09:35		
Chromium	20.2	6.0	mg/kg	SW846 6010B	12/17-12/19/07	KDW4V1AH
		Dilution Factor: 5		Analysis Time...: 09:35		
Lead	731	6.0	mg/kg	SW846 6010B	12/17-12/19/07	KDW4V1AE
		Dilution Factor: 5		Analysis Time...: 09:35		
Selenium	ND	9.0	mg/kg	SW846 6010B	12/17-12/19/07	KDW4V1AF
		Dilution Factor: 5		Analysis Time...: 09:35		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Kansas Dept of Health and Environment

Client Sample ID: SPI #5 1-2'

General Chemistry

Lot-Sample #....: F7L110245-002

Work Order #....: KDW4V

Matrix.....: SOLID

Date Sampled....: 12/05/07 11:25 Date Received...: 12/11/07

% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	16.7	0.10	%	MCANW 160.3 MOD	12/12-12/13/07	7346047
		Dilution Factor: 1		Analysis Time...: 00:00		

TestAmerica St. Louis

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #5 7'

GC/MS Volatiles

Lot-Sample #....: F7L110245-003 Work Order #....: KDW4X1AA Matrix.....: SOLID
 Date Sampled....: 12/05/07 11:35 Date Received...: 12/11/07
 Prep Date.....: 12/14/07 Analysis Date...: 12/14/07
 Prep Batch #....: 7348460 Analysis Time...: 18:44
 Dilution Factor: 1
 % Moisture.....: 22 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromobenzene	ND	6.4	ug/kg
Bromochloromethane	ND	6.4	ug/kg
n-Butylbenzene	ND	6.4	ug/kg
sec-Butylbenzene	ND	6.4	ug/kg
tert-Butylbenzene	ND	6.4	ug/kg
2-Chlorotoluene	ND	6.4	ug/kg
4-Chlorotoluene	ND	6.4	ug/kg
1,2-Dibromoethane	ND	6.4	ug/kg
Dibromomethane	ND	6.4	ug/kg
Dichlorodifluoromethane	ND	13	ug/kg
cis-1,2-Dichloroethene	ND	6.4	ug/kg
trans-1,2-Dichloroethene	ND	6.4	ug/kg
1,3-Dichloropropane	ND	6.4	ug/kg
2,2-Dichloropropane	ND	6.4	ug/kg
1,1-Dichloropropene	ND	6.4	ug/kg
Trichlorofluoromethane	ND	6.4	ug/kg
Hexachlorobutadiene	ND	6.4	ug/kg
Isopropylbenzene	ND	6.4	ug/kg
p-Isopropyltoluene	ND	6.4	ug/kg
Naphthalene	5.8 J,B	6.4	ug/kg
n-Propylbenzene	ND	6.4	ug/kg
1,1,1,2-Tetrachloroethane	ND	6.4	ug/kg
1,2,3-Trichlorobenzene	ND	6.4	ug/kg
1,2,4-Trichloro- benzene	ND	6.4	ug/kg
1,2,3-Trichloropropane	ND	6.4	ug/kg
1,2,4-Trimethylbenzene	0.63 J,B	6.4	ug/kg
1,3,5-Trimethylbenzene	ND	6.4	ug/kg
Chloromethane	ND	13	ug/kg
Vinyl chloride	ND	6.4	ug/kg
Bromomethane	ND	13	ug/kg
Chloroethane	ND	13	ug/kg
Acetone	ND	64	ug/kg
1,1-Dichloroethene	ND	6.4	ug/kg
Methylene chloride	ND	6.4	ug/kg
Carbon disulfide	ND	6.4	ug/kg
1,1-Dichloroethane	ND	6.4	ug/kg
2-Butanone	ND	13	ug/kg

(Continued on next page)

Kansas Dept of Health and Environment

Client Sample ID: SPI #5 7'

GC/MS Volatiles

Lot-Sample #....: F7L110245-003 Work Order #....: KDW4X1AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloroform	ND	6.4	ug/kg
1,1,1-Trichloroethane	ND	6.4	ug/kg
Carbon tetrachloride	ND	6.4	ug/kg
1,2-Dichloroethane	ND	6.4	ug/kg
Benzene	ND	6.4	ug/kg
Trichloroethene	ND	6.4	ug/kg
1,2-Dichloropropane	ND	6.4	ug/kg
Bromodichloromethane	ND	6.4	ug/kg
4-Methyl-2-pentanone	ND	13	ug/kg
Toluene	ND	6.4	ug/kg
1,1,2-Trichloroethane	ND	6.4	ug/kg
2-Hexanone	ND	13	ug/kg
Tetrachloroethene	ND	6.4	ug/kg
Chlorobenzene	ND	6.4	ug/kg
Ethylbenzene	ND	6.4	ug/kg
Xylenes (total)	ND	19	ug/kg
Styrene	ND	6.4	ug/kg
Bromoform	ND	6.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg
1,2-Dichlorobenzene	ND	6.4	ug/kg
1,3-Dichlorobenzene	ND	6.4	ug/kg
1,4-Dichlorobenzene	ND	6.4	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	92	(67 - 150)
Dibromofluoromethane	104	(59 - 133)
1,2-Dichloroethane-d4	108	(70 - 132)
4-Bromofluorobenzene	102	(57 - 150)

NOTE (S):

Results and reporting limits have been adjusted for dry weight.

1 Estimated result. Result is less than RL.

2 Method blank concentration. The associated method blank contains the target analyte at a reportable level.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #5 0-6"

Radiochemistry

Lab Sample ID: F7L110245-001
 Work Order: KDW4H
 Matrix: SOLID
 Date Collected: 12/05/07 1115
 Date Received: 12/11/07 0945

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				pCi/g		Batch # 7345420	Yld % 101
Radium (226)	116		11	1	0.3	12/11/07	01/02/08

NOTE(S)

Data are incomplete without the case narrative.
 MDC is determined by instrument performance only.
 Bold results are greater than the MDC

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #5 1-2'

Radiochemistry

Lab Sample ID: F7L110245-002
 Work Order: KDW4V
 Matrix: SOLID
 Date Collected: 12/05/07 1125
 Date Received: 12/11/07 0945

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				pCi/g		Batch # 7345420	Yld % 107
Radium (226)	1150		93	1	0.7	12/11/07	01/02/08

NOTE(S)

Data are incomplete without the case narrative.
 MDC is determined by instrument performance only.
 Bold results are greater than the MDC



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

ORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: VG Lab Number: 498809
Address: ATTN: BOB BENNE, CURTIS SOB SUITE 410 Date Rec'd: 09/06/07
TOPKA, KS 66612 Report Date: 09/14/07

Acct No: 4EM80 Site ID No.: 08772288 Sample Type: WATER Program Code: EP
Site: STANDARD PRODUCTS, INC. (SPI) - TRIP BLANK No. Compositd:
Collected By: REB- BER Depth: Date: 09/05/07 Time:

VOLATILE ORGANIC COMPOUNDS	CONCENTRATION (ug/L)	Analysis Date	EPA Method
Vinyl Chloride	< 0.50	09/12/07	8260
1,1-Dichloroethylene	< 0.50	09/12/07	8260
Dichloromethane	< 0.50	09/12/07	8260
trans 1,2-Dichloroethylene	< 0.50	09/12/07	8260
cis 1,2-Dichloroethylene	< 0.50	09/12/07	8260
1,1,1-Trichloroethane	< 0.50	09/12/07	8260
Tetrachloroethane	< 0.50	09/12/07	8260
Benzene	< 0.50	09/12/07	8260
1,2-Dichloroethane	< 0.50	09/12/07	8260
Trichloroethylene	< 0.50	09/12/07	8260
1,2-Dichloropropane	< 0.50	09/12/07	8260
Toluene	< 0.50	09/12/07	8260
1,1,2-Trichloroethane	< 0.50	09/12/07	8260
Tetrachloroethylene	< 0.50	09/12/07	8260
Chlorobenzene	< 0.50	09/12/07	8260
Ethylbenzene	< 0.50	09/12/07	8260
Xylene	< 0.50	09/12/07	8260
Styrene	< 0.50	09/12/07	8260
1,4-Dichlorobenzene	< 0.50	09/12/07	8260
1,2-Dichlorobenzene	< 0.50	09/12/07	8260
1,2,4-Trichlorobenzene	< 0.50	09/12/07	8260
Chloromethane	< 0.50	09/12/07	8260
Bromomethane	< 0.50	09/12/07	8260
Chloroethane	< 0.50	09/12/07	8260
1,1-Dichloroethane	< 0.50	09/12/07	8260
2,2-Dichloropropane	< 0.50	09/12/07	8260
Trichloromethane (THM)	< 0.50	09/12/07	8260
1,1-Dichloropropene	< 0.50	09/12/07	8260
Dibromomethane	< 0.50	09/12/07	8260
Bromodichloromethane (THM)	< 0.50	09/12/07	8260
1,3-Dichloropropane	< 0.50	09/12/07	8260
Dibromochloromethane (THM)	< 0.50	09/12/07	8260
1,1,1,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromoform (THM)	< 0.50	09/12/07	8260
1,1,2,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromobenzene	< 0.50	09/12/07	8260
1,2,3-Trichloropropane	< 0.50	09/12/07	8260
ortho-Chlorotoluene	< 0.50	09/12/07	8260
para-Chlorotoluene	< 0.50	09/12/07	8260
1,3-Dichlorobenzene	< 0.50	09/12/07	8260
Ethylene Dibromide (EDB)	< 0.010	09/12/07	8260
1,2-Dibromo-3-chloropropane	< 0.020	09/12/07	8260
Fluorotrichloromethane	< 0.50	09/12/07	8260
Dichlorodifluoromethane	< 0.50	09/12/07	8260
Isopropylbenzene	< 0.50	09/12/07	8260
n-Propylbenzene	< 0.50	09/12/07	8260
1,3,5-Trimethylbenzene	< 0.50	09/12/07	8260
tert-Butylbenzene	< 0.50	09/12/07	8260
1,2,4-Trimethylbenzene	< 0.50	09/12/07	8260
sec-Butylbenzene	< 0.50	09/12/07	8260
para-Isopropyltoluene	< 0.50	09/12/07	8260
n-Butylbenzene	< 0.50	09/12/07	8260
Naphthalene	< 0.50	09/12/07	8260
Methyl tert-butyl ether	< 0.50	09/12/07	8260

Chemist: Richard L. Pierce

< - Not Detected at Indicated Level

RECEIVED

SEP 17 2007

Duane R. Bolina, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
CLIA #064825

ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

ORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: VG Lab Number: 498810
Address: ATTN: BOB BENNE, CURTIS SOB SUITE 410 Date Rec'd: 09/06/07
TOPEKA, KS 66612 Report Date: 09/14/07

Acct No: 4EM80 Site ID No.: 08772288 Sample Type: WATER Program Code: EP
Site: STANDARD PRODUCTS, INC. (SPI) - BACKGROUND No. Compositd:
Collected By: REB- BER Depth: 0017 Date: 09/05/07 Time: 11:40

VOLATILE ORGANIC COMPOUNDS	CONCENTRATION (ug/L)	Analysis Date	EPA Method
Vinyl Chloride	< 0.50	09/12/07	8260
1,1-Dichloroethylene	< 0.50	09/12/07	8260
Dichloromethane	< 0.50	09/12/07	8260
trans 1,2-Dichloroethylene	< 0.50	09/12/07	8260
cis 1,2-Dichloroethylene	< 0.50	09/12/07	8260
1,1,1-Trichloroethane	< 0.50	09/12/07	8260
Tetrachloroethane	< 0.50	09/12/07	8260
Benzene	< 0.50	09/12/07	8260
1,2-Dichloroethane	< 0.50	09/12/07	8260
Trichloroethylene	< 0.50	09/12/07	8260
1,2-Dichloropropane	< 0.50	09/12/07	8260
Toluene	< 0.50	09/12/07	8260
1,1,2-Trichloroethane	< 0.50	09/12/07	8260
Tetrachloroethylene	< 0.50	09/12/07	8260
Chlorobenzene	< 0.50	09/12/07	8260
Ethylbenzene	< 0.50	09/12/07	8260
Xylene	< 0.50	09/12/07	8260
Styrene	< 0.50	09/12/07	8260
1,4-Dichlorobenzene	< 0.50	09/12/07	8260
1,2-Dichlorobenzene	< 0.50	09/12/07	8260
1,2,4-Trichlorobenzene	< 0.50	09/12/07	8260
Chloromethane	< 0.50	09/12/07	8260
Bromomethane	< 0.50	09/12/07	8260
Chloroethane	< 0.50	09/12/07	8260
1,1-Dichloroethane	< 0.50	09/12/07	8260
2,2-Dichloropropane	< 0.50	09/12/07	8260
Trichloromethane (THM)	< 0.50	09/12/07	8260
1,1-Dichloropropene	< 0.50	09/12/07	8260
Dibromomethane	< 0.50	09/12/07	8260
Bromodichloromethane (THM)	< 0.50	09/12/07	8260
1,3-Dichloropropane	< 0.50	09/12/07	8260
Dibromochloromethane (THM)	< 0.50	09/12/07	8260
1,1,1,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromoform (THM)	< 0.50	09/12/07	8260
1,1,2,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromobenzene	< 0.50	09/12/07	8260
1,2,3-Trichloropropane	< 0.50	09/12/07	8260
ortho-Chlorotoluene	< 0.50	09/12/07	8260
para-Chlorotoluene	< 0.50	09/12/07	8260
1,3-Dichlorobenzene	< 0.50	09/12/07	8260
Ethylene Dibromide (EDB)	< 0.010	09/12/07	8260
1,2-Dibromo-3-chloropropane	< 0.020	09/12/07	8260
Fluorotrichloromethane	< 0.50	09/12/07	8260
Dichlorodifluoromethane	< 0.50	09/12/07	8260
Isopropylbenzene	< 0.50	09/12/07	8260
n-Propylbenzene	< 0.50	09/12/07	8260
1,3,5-Trimethylbenzene	< 0.50	09/12/07	8260
tert-Butylbenzene	< 0.50	09/12/07	8260
1,2,4-Trimethylbenzene	< 0.50	09/12/07	8260
sec-Butylbenzene	< 0.50	09/12/07	8260
para-Isopropyltoluene	< 0.50	09/12/07	8260
n-Butylbenzene	< 0.50	09/12/07	8260
Naphthalene	< 0.50	09/12/07	8260
Methyl tert-butyl ether	< 0.50	09/12/07	8260

Comment: A trace of chlorodifluoromethane was indicated.

Chemist: Richard L. Pierce

< - Not Detected at Indicated Level

RECEIVED

SEP 17 2007

Duane R. Bolina, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
CLIA #064825

ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES

Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001

REPORT OF ANALYSIS

ORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: VG Lab Number: 498811
Address: ATTN: BOB BENNE, CURTIS SOB SUITE 410 Date Rec'd: 09/06/07
TOPEKA, KS 66612 Report Date: 09/14/07Acct No: 4EM80 Site ID No.: 08772288 Sample Type: WATER Program Code: EP
Site: STANDARD PRODUCTS, INC. (SPI) - #1 No. Compositd:
Collected By: REB- BER Depth: 0017 Date: 09/05/07 Time: 15:55

VOLATILE ORGANIC COMPOUNDS	CONCENTRATION (ug/L)	Analysis Date	EPA Method
Vinyl Chloride	< 0.50	09/12/07	8260
1,1-Dichloroethylene	< 0.50	09/12/07	8260
Dichloromethane	< 0.50	09/12/07	8260
trans 1,2-Dichloroethylene	< 0.50	09/12/07	8260
cis 1,2-Dichloroethylene	0.72	09/12/07	8260
1,1,1-Trichloroethane	3.5	09/12/07	8260
Tetrachloromethane	< 0.50	09/12/07	8260
Benzene	< 0.50	09/12/07	8260
1,2-Dichloroethane	< 0.50	09/12/07	8260
Trichloroethylene	10	09/12/07	8260
1,2-Dichloropropane	< 0.50	09/12/07	8260
Toluene	< 0.50	09/12/07	8260
1,1,2-Trichloroethane	< 0.50	09/12/07	8260
Tetrachloroethylene	< 0.50	09/12/07	8260
Chlorobenzene	< 0.50	09/12/07	8260
Ethylbenzene	< 0.50	09/12/07	8260
Xylene	< 0.50	09/12/07	8260
Styrene	< 0.50	09/12/07	8260
1,4-Dichlorobenzene	< 0.50	09/12/07	8260
1,2-Dichlorobenzene	< 0.50	09/12/07	8260
1,2,4-Trichlorobenzene	< 0.50	09/12/07	8260
Chloromethane	< 0.50	09/12/07	8260
Bromomethane	< 0.50	09/12/07	8260
Chloroethane	< 0.50	09/12/07	8260
1,1-Dichloroethane	< 0.50	09/12/07	8260
2,2-Dichloropropane	< 0.50	09/12/07	8260
Trichloromethane (THM)	< 0.50	09/12/07	8260
1,1-Dichloropropene	< 0.50	09/12/07	8260
Dibromomethane	< 0.50	09/12/07	8260
Bromodichloromethane (THM)	< 0.50	09/12/07	8260
1,3-Dichloropropane	< 0.50	09/12/07	8260
Dibromochloromethane (THM)	< 0.50	09/12/07	8260
1,1,1,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromoform (THM)	< 0.50	09/12/07	8260
1,1,2,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromobenzene	< 0.50	09/12/07	8260
1,2,3-Trichloropropane	< 0.50	09/12/07	8260
ortho-Chlorotoluene	< 0.50	09/12/07	8260
para-Chlorotoluene	< 0.50	09/12/07	8260
1,3-Dichlorobenzene	< 0.50	09/12/07	8260
Ethylene Dibromide (EDB)	< 0.010	09/12/07	8260
1,2-Dibromo-3-chloropropane	< 0.020	09/12/07	8260
Fluorotrichloromethane	< 0.50	09/12/07	8260
Dichlorodifluoromethane	< 0.50	09/12/07	8260
Isopropylbenzene	< 0.50	09/12/07	8260
n-Propylbenzene	< 0.50	09/12/07	8260
1,3,5-Trimethylbenzene	< 0.50	09/12/07	8260
tert-Butylbenzene	< 0.50	09/12/07	8260
1,2,4-Trimethylbenzene	< 0.50	09/12/07	8260
sec-Butylbenzene	< 0.50	09/12/07	8260
para-Isopropyltoluene	< 0.50	09/12/07	8260
n-Butylbenzene	< 0.50	09/12/07	8260
Naphthalene	< 0.50	09/12/07	8260
Methyl tert-butyl ether	< 0.50	09/12/07	8260

Chemist: Richard L. Pierce *RLP*

< - Not Detected at Indicated Level

RECEIVED

SEP 17 2007

Duane R. Boline, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641

17D060254

BUREAU OF
ENVIRONMENTAL REMEDIATION

DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES

Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001

REPORT OF ANALYSIS

ORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: VG Lab Number: 498812
Address: ATTN: BOB BENNE, CURTIS SOB SUITE 410 Date Rec'd: 09/06/07
TOPEKA, KS 66612 Report Date: 09/14/07Acct No: 4EM80 Site ID No.: 08772288 Sample Type: WATER Program Code: EP
Site: STANDARD PRODUCTS, INC. (SPI) - #2 No. Compositd:
Collected By: REB- BER Depth: Date: 09/05/07 Time: 15:05

VOLATILE ORGANIC COMPOUNDS	CONCENTRATION (ug/L)	Analysis Date	EPA Method
Vinyl Chloride	< 0.50	09/12/07	8260
1,1-Dichloroethylene	< 0.50	09/12/07	8260
Dichloromethane	< 0.50	09/12/07	8260
trans 1,2-Dichloroethylene	< 0.50	09/12/07	8260
cis 1,2-Dichloroethylene	15	09/12/07	8260
1,1,1-Trichloroethane	< 0.50	09/12/07	8260
Tetrachloromethane	< 0.50	09/12/07	8260
Benzene	< 0.50	09/12/07	8260
1,2-Dichloroethane	< 0.50	09/12/07	8260
Trichloroethylene	8.9	09/12/07	8260
1,2-Dichloropropane	< 0.50	09/12/07	8260
Toluene	< 0.50	09/12/07	8260
1,1,2-Trichloroethane	< 0.50	09/12/07	8260
Tetrachloroethylene	1.6	09/12/07	8260
Chlorobenzene	< 0.50	09/12/07	8260
Ethylbenzene	< 0.50	09/12/07	8260
Xylene	< 0.50	09/12/07	8260
Styrene	< 0.50	09/12/07	8260
1,4-Dichlorobenzene	< 0.50	09/12/07	8260
1,2-Dichlorobenzene	< 0.50	09/12/07	8260
1,2,4-Trichlorobenzene	< 0.50	09/12/07	8260
Chloromethane	< 0.50	09/12/07	8260
Bromomethane	< 0.50	09/12/07	8260
Chloroethane	< 0.50	09/12/07	8260
1,1-Dichloroethane	< 0.50	09/12/07	8260
2,2-Dichloropropane	< 0.50	09/12/07	8260
Trichloromethane (THM)	< 0.50	09/12/07	8260
1,1-Dichloropropene	< 0.50	09/12/07	8260
Dibromomethane	< 0.50	09/12/07	8260
Bromodichloromethane (THM)	< 0.50	09/12/07	8260
1,3-Dichloropropane	< 0.50	09/12/07	8260
Dibromochloromethane (THM)	< 0.50	09/12/07	8260
1,1,1,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromoform (THM)	< 0.50	09/12/07	8260
1,1,1,2,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromobenzene	< 0.50	09/12/07	8260
1,2,3-Trichloropropane	< 0.50	09/12/07	8260
ortho-Chlorotoluene	< 0.50	09/12/07	8260
para-Chlorotoluene	< 0.50	09/12/07	8260
1,3-Dichlorobenzene	< 0.50	09/12/07	8260
Ethylene Dibromide (EDB)	< 0.010	09/12/07	8260
1,2-Dibromo-3-chloropropane	< 0.020	09/12/07	8260
Fluorotrichloromethane	< 0.50	09/12/07	8260
Dichlorodifluoromethane	< 0.50	09/12/07	8260
Isopropylbenzene	< 0.50	09/12/07	8260
n-Propylbenzene	< 0.50	09/12/07	8260
1,3,5-Trimethylbenzene	< 0.50	09/12/07	8260
tert-Butylbenzene	< 0.50	09/12/07	8260
1,2,4-Trimethylbenzene	< 0.50	09/12/07	8260
sec-Butylbenzene	< 0.50	09/12/07	8260
para-Isopropyltoluene	< 0.50	09/12/07	8260
n-Butylbenzene	< 0.50	09/12/07	8260
Naphthalene	< 0.50	09/12/07	8260
Methyl tert-butyl ether	< 0.50	09/12/07	8260

Chemist: Richard L. Pierce *RLP*

< - Not Detected at Indicated Level

RECEIVED

SEP 17 2007

Duane R. Boline, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641

CLD 006482

BUREAU OF
ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

ORGANIC CHEMISTRY

Report To: BUREAU OF ENV. REMEDIATION Analysis Code: VG Lab Number: 498813
Address: ATTN: BOB BENNE, CURTIS SOB SUITE 410 Date Rec'd: 09/06/07
TOPEKA, KS 66612 Report Date: 09/14/07

Acct No: 4EM80 Site ID No.: 08772288 Sample Type: WATER Program Code: EP
Site: STANDARD PRODUCTS, INC. (SPI) - #4 No. Compositd:
Collected By: REB - BER Depth: Date: 09/05/07 Time: 13:05

VOLATILE ORGANIC COMPOUNDS	CONCENTRATION (ug/L)	Analysis Date	EPA Method
Vinyl Chloride	< 0.50	09/12/07	8260
1,1-Dichloroethylene	< 0.50	09/12/07	8260
Dichloromethane	< 0.50	09/12/07	8260
trans 1,2-Dichloroethylene	< 0.50	09/12/07	8260
cis 1,2-Dichloroethylene	13	09/12/07	8260
1,1,1-Trichloroethylene	< 0.50	09/12/07	8260
Tetrachloroethane	< 0.50	09/12/07	8260
Benzene	< 0.50	09/12/07	8260
1,2-Dichloroethane	< 0.50	09/12/07	8260
Trichloroethylene	12	09/12/07	8260
1,2-Dichloropropane	< 0.50	09/12/07	8260
Toluene	< 0.50	09/12/07	8260
1,1,2-Trichloroethane	< 0.50	09/12/07	8260
Tetrachloroethylene	3.9	09/12/07	8260
Chlorobenzene	< 0.50	09/12/07	8260
Ethylbenzene	< 0.50	09/12/07	8260
Xylene	< 0.50	09/12/07	8260
Styrene	< 0.50	09/12/07	8260
1,4-Dichlorobenzene	< 0.50	09/12/07	8260
1,2-Dichlorobenzene	< 0.50	09/12/07	8260
1,2,4-Trichlorobenzene	< 0.50	09/12/07	8260
Chloromethane	< 0.50	09/12/07	8260
Bromomethane	< 0.50	09/12/07	8260
Chloroethane	< 0.50	09/12/07	8260
1,1-Dichloroethane	< 0.50	09/12/07	8260
2,2-Dichloropropane	< 0.50	09/12/07	8260
Trichloromethane (THM)	< 0.50	09/12/07	8260
1,1-Dichloropropane	< 0.50	09/12/07	8260
Dibromomethane	< 0.50	09/12/07	8260
Bromodichloromethane (THM)	< 0.50	09/12/07	8260
1,3-Dichloropropane	< 0.50	09/12/07	8260
Dibromochloromethane (THM)	< 0.50	09/12/07	8260
1,1,1,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromofom (THM)	< 0.50	09/12/07	8260
1,1,2,2-Tetrachloroethane	< 0.50	09/12/07	8260
Bromobenzene	< 0.50	09/12/07	8260
1,2,3-Trichloropropane	< 0.50	09/12/07	8260
ortho-Chlorotoluene	< 0.50	09/12/07	8260
para-Chlorotoluene	< 0.50	09/12/07	8260
1,3-Dichlorobenzene	< 0.50	09/12/07	8260
Ethylene Dibromide (EDB)	< 0.010	09/12/07	8260
1,2-Dibromo-3-chloropropane	< 0.020	09/12/07	8260
Fluorotrichloromethane	< 0.50	09/12/07	8260
Dichlorodifluoromethane	< 0.50	09/12/07	8260
Isopropylbenzene	< 0.50	09/12/07	8260
n-Propylbenzene	< 0.50	09/12/07	8260
1,3,5-Trimethylbenzene	< 0.50	09/12/07	8260
tert-Butylbenzene	< 0.50	09/12/07	8260
1,2,4-Trimethylbenzene	< 0.50	09/12/07	8260
sec-Butylbenzene	< 0.50	09/12/07	8260
para-Isopropyltoluene	< 0.50	09/12/07	8260
n-Butylbenzene	< 0.50	09/12/07	8260
Naphthalene	< 0.50	09/12/07	8260
Methyl tert-butyl ether	< 0.50	09/12/07	8260

Chemist: Richard L. Pierce

< - Not Detected at Indicated Level

RECEIVED

SEP 17 2007

Duane R. Bolino, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
CLIA #060648

BUREAU OF
ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

ORGANIC CHEMISTRY

Report To: BUREAU OF ENV. REMEDIATION Analysis Code: VG Lab Number: 503197
Address: ATTN: BOB BENNE, CURTIS SOB SUITE 410 Date Rec'd: 12/06/07
TOPEKA, KS 66612 Report Date: 12/14/07

Acct No: 4EM80 Site ID No.: 08772288 Sample Type: WATER Program Code: EP
Site: STANDARD PRODUCTS, INC. - SPI TRIP BLANK No. Compositd:
Collected By: REB - BER Depth: Date: 12/05/07 Time:

VOLATILE ORGANIC COMPOUNDS	CONCENTRATION (ug/L)	Analysis Date	EPA Method
Vinyl Chloride	< 0.50	12/12/07	8260
1,1-Dichloroethylene	< 0.50	12/12/07	8260
Dichloromethane	< 0.50	12/12/07	8260
trans 1,2-Dichloroethylene	< 0.50	12/12/07	8260
cis 1,2-Dichloroethylene	< 0.50	12/12/07	8260
1,1,1-Trichloroethylene	< 0.50	12/12/07	8260
Tetrachloroethane	< 0.50	12/12/07	8260
Benzene	< 0.50	12/12/07	8260
1,2-Dichloroethane	< 0.50	12/12/07	8260
Trichloroethylene	< 0.50	12/12/07	8260
1,2-Dichloropropane	< 0.50	12/12/07	8260
Toluene	< 0.50	12/12/07	8260
1,1,2-Trichloroethane	< 0.50	12/12/07	8260
Tetrachloroethylene	< 0.50	12/12/07	8260
Chlorobenzene	< 0.50	12/12/07	8260
Ethylbenzene	< 0.50	12/12/07	8260
Xylene	< 0.50	12/12/07	8260
Styrene	< 0.50	12/12/07	8260
1,4-Dichlorobenzene	< 0.50	12/12/07	8260
1,2-Dichlorobenzene	< 0.50	12/12/07	8260
1,2,4-Trichlorobenzene	< 0.50	12/12/07	8260
Chloromethane	< 0.50	12/12/07	8260
Bromomethane	< 0.50	12/12/07	8260
Chloroethane	< 0.50	12/12/07	8260
1,1-Dichloroethane	< 0.50	12/12/07	8260
2,2-Dichloropropane	< 0.50	12/12/07	8260
Trichloromethane (THM)	< 0.50	12/12/07	8260
1,1-Dichloropropane	< 0.50	12/12/07	8260
Dibromomethane	< 0.50	12/12/07	8260
Bromodichloromethane (THM)	< 0.50	12/12/07	8260
1,3-Dichloropropane	< 0.50	12/12/07	8260
Dibromochloromethane (THM)	< 0.50	12/12/07	8260
1,1,1,2-Tetrachloroethane	< 0.50	12/12/07	8260
Bromofom (THM)	< 0.50	12/12/07	8260
1,1,2,2-Tetrachloroethane	< 0.50	12/12/07	8260
Bromobenzene	< 0.50	12/12/07	8260
1,2,3-Trichloropropane	< 0.50	12/12/07	8260
ortho-Chlorotoluene	< 0.50	12/12/07	8260
para-Chlorotoluene	< 0.50	12/12/07	8260
1,3-Dichlorobenzene	< 0.50	12/12/07	8260
Ethylene Dibromide (EDB)	< 0.010	12/12/07	8260
1,2-Dibromo-3-chloropropane	< 0.020	12/12/07	8260
Fluorotrichloromethane	< 0.50	12/12/07	8260
Dichlorodifluoromethane	< 0.50	12/12/07	8260
Isopropylbenzene	< 0.50	12/12/07	8260
n-Propylbenzene	< 0.50	12/12/07	8260
1,3,5-Trimethylbenzene	< 0.50	12/12/07	8260
tert-Butylbenzene	< 0.50	12/12/07	8260
1,2,4-Trimethylbenzene	< 0.50	12/12/07	8260
sec-Butylbenzene	< 0.50	12/12/07	8260
para-Isopropyltoluene	< 0.50	12/12/07	8260
n-Butylbenzene	< 0.50	12/12/07	8260
Naphthalene	< 0.50	12/12/07	8260
Methyl tert-butyl ether	< 0.50	12/12/07	8260

Chemist: Richard L. Pierce

< - Not Detected at Indicated Level

RECEIVED

DEC 18 2007

Duane R. Bolino, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
CLIA #060648

BUREAU OF
ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001

REPORT OF ANALYSIS

ORGANIC CHEMISTRY

Report To: BUREAU OF ENV. REMEDIATION Analysis Code: VG Lab Number: 503198
Address: ATTN: BOB BENNE, CURTIS SOB SUITE 410 Date Rec'd: 12/06/07
TOPEKA, KS 66612 Report Date: 12/14/07

Acct No: 4EM80 Site ID No.: 08772288
Site: STANDARD PRODUCTS, INC. - SPI #5 Sample Type: WATER Program Code: EP
Collected By: REB - BER Date: 12/05/07 Time: 12:10

VOLATILE ORGANIC COMPOUNDS	CONCENTRATION (ug/L)	Analysis Date	EPA Method
Vinyl Chloride	< 0.50	12/12/07	8260
1,1-Dichloroethylene	< 0.50	12/12/07	8260
Dichloromethane	< 0.50	12/12/07	8260
trans 1,2-Dichloroethylene	< 0.50	12/12/07	8260
cis 1,2-Dichloroethylene	9.6	12/12/07	8260
1,1,1-Trichloroethane	0.75	12/12/07	8260
Tetrachloroethane	< 0.50	12/12/07	8260
Benzene	< 0.50	12/12/07	8260
1,2-Dichloroethane	< 0.50	12/12/07	8260
Trichloroethylene	13	12/12/07	8260
1,2-Dichloropropane	< 0.50	12/12/07	8260
Toluene	1.0	12/12/07	8260
1,1,2-Trichloroethane	< 0.50	12/12/07	8260
Tetrachloroethylene	3.9	12/12/07	8260
Chlorobenzene	< 0.50	12/12/07	8260
Ethylbenzene	< 0.50	12/12/07	8260
Xylene	< 0.50	12/12/07	8260
Styrene	< 0.50	12/12/07	8260
1,4-Dichlorobenzene	< 0.50	12/12/07	8260
1,2-Dichlorobenzene	< 0.50	12/12/07	8260
1,2,4-Trichlorobenzene	< 0.50	12/12/07	8260
Chloromethane	< 0.50	12/12/07	8260
Bromomethane	< 0.50	12/12/07	8260
Chloroethane	< 0.50	12/12/07	8260
1,1-Dichloroethane	< 0.50	12/12/07	8260
2,2-Dichloropropane	< 0.50	12/12/07	8260
Trichloromethane (THM)	< 0.50	12/12/07	8260
1,1-Dichloropropene	< 0.50	12/12/07	8260
Dibromomethane	< 0.50	12/12/07	8260
Bromodichloromethane (THM)	< 0.50	12/12/07	8260
1,3-Dichloropropane	< 0.50	12/12/07	8260
Dibromochloromethane (THM)	< 0.50	12/12/07	8260
1,1,1,2-Tetrachloroethane	< 0.50	12/12/07	8260
Bromoform (THM)	< 0.50	12/12/07	8260
1,1,2,2-Tetrachloroethane	< 0.50	12/12/07	8260
Bromobenzene	< 0.50	12/12/07	8260
1,2,3-Trichloropropane	< 0.50	12/12/07	8260
ortho-Chlorotoluene	< 0.50	12/12/07	8260
para-Chlorotoluene	< 0.50	12/12/07	8260
1,3-Dichlorobenzene	< 0.50	12/12/07	8260
Ethylene Dibromide (EDB)	< 0.010	12/12/07	8260
1,2-Dibromo-3-chloropropane	< 0.020	12/12/07	8260
Fluorotrichloromethane	< 0.50	12/12/07	8260
Dichlorodifluoromethane	< 0.50	12/12/07	8260
Isopropylbenzene	< 0.50	12/12/07	8260
n-Propylbenzene	< 0.50	12/12/07	8260
1,3,5-Trimethylbenzene	< 0.50	12/12/07	8260
tert-Butylbenzene	< 0.50	12/12/07	8260
1,2,4-Trimethylbenzene	< 0.50	12/12/07	8260
sec-Butylbenzene	< 0.50	12/12/07	8260
para-Isopropyltoluene	< 0.50	12/12/07	8260
n-Butylbenzene	< 0.50	12/12/07	8260
Naphthalene	< 0.50	12/12/07	8260
Methyl tert-butyl ether	< 0.50	12/12/07	8260

Chemist: Richard L. Pierce

< - Not Detected at Indicated Level

RECEIVED

DEC 18 2007

Duane R. Boline, Ph.D., Director
Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641

BUREAU OF
ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001

REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV. REMEDIATION Analysis Code: PT Lab Number: 498805
ATTN: Bob Benne
CURTIS SOB SUITE 410
TOPEKA KS 66612

Site ID: 4EM80
Account Code: EP

Collection Location: Standard Products, Inc. (SPI) - BCKGRND
Collector: REB - BER Matrix: Water Collect Depth:
Date/Time Collected: 09/05/07 00:00 Date/Time Received: 09/06/07 15:28

Sample Comments: filtered H2O

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum	< 0.050	mg/L	09/21/07	EPA 200.7
Antimony	< 0.050	mg/L	09/21/07	EPA 200.7
Arsenic	< 0.050	mg/L	09/21/07	EPA 200.7
Barium	< 0.098	mg/L	09/21/07	EPA 200.7
Beryllium	< 0.0010	mg/L	09/21/07	EPA 200.7
Boron	0.27	mg/L	09/21/07	EPA 200.7
Cadmium	< 0.0050	mg/L	09/21/07	EPA 200.7
Calcium	170	mg/L	09/21/07	EPA 200.7
Chromium	< 0.010	mg/L	09/21/07	EPA 200.7
Cobalt	< 0.010	mg/L	09/21/07	EPA 200.7
Copper	< 0.010	mg/L	09/21/07	EPA 200.7
Iron	< 0.010	mg/L	09/21/07	EPA 200.7
Lead	< 0.050	mg/L	09/21/07	EPA 200.7
Magnesium	28	mg/L	09/21/07	EPA 200.7
Manganese	0.13	mg/L	09/21/07	EPA 200.7
Mercury	< 0.50	ug/L	09/19/07	EPA 245.1
Molybdenum	0.021	mg/L	09/21/07	EPA 200.7
Nickel	0.039	mg/L	09/21/07	EPA 200.7
Potassium	6.2	mg/L	09/21/07	EPA 200.7
Selenium	< 0.050	mg/L	09/21/07	EPA 200.7
Silica	16	mg/L	09/21/07	EPA 200.7
Silver	< 0.010	mg/L	09/21/07	EPA 200.7
Sodium	130	mg/L	09/21/07	EPA 200.7
Thallium	< 0.050	mg/L	09/21/07	EPA 200.7
Vanadium	< 0.0050	mg/L	09/21/07	EPA 200.7
Zinc	0.013	mg/L	09/21/07	EPA 200.7

Reporting Analyst: JAB
Date Reported: 09/25/07
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BUREAU OF
ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: PT Lab Number: 498806
ATTN: Bob Benne
CURTIS SOB SUITE 410
TOPEKA KS 66612
4EM80
Site ID: 08772288
Account Code: EP
Collection Location: Standard Products, Inc. (SPI) - #1
Collector: REB - BER Matrix: Water Collect Depth:
Date/Time Collected: 09/05/07 00:00 Date/Time Received: 09/06/07 15:29
Sample Comments: filtered H2O

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum	< 0.050	mg/L	09/21/07	EPA 200.7
Antimony	< 0.050	mg/L	09/21/07	EPA 200.7
Arsenic	< 0.050	mg/L	09/21/07	EPA 200.7
Barium	0.13	mg/L	09/21/07	EPA 200.7
Beryllium	< 0.0010	mg/L	09/21/07	EPA 200.7
Boron	0.34	mg/L	09/21/07	EPA 200.7
Cadmium	< 0.0050	mg/L	09/21/07	EPA 200.7
Calcium	140	mg/L	09/21/07	EPA 200.7
Chromium	< 0.010	mg/L	09/21/07	EPA 200.7
Cobalt	0.012	mg/L	09/21/07	EPA 200.7
Copper	< 0.010	mg/L	09/21/07	EPA 200.7
Iron	0.043	mg/L	09/21/07	EPA 200.7
Lead	< 0.050	mg/L	09/21/07	EPA 200.7
Magnesium	15	mg/L	09/21/07	EPA 200.7
Manganese	2.3	mg/L	09/21/07	EPA 200.7
Mercury	< 0.50	ug/L	09/19/07	EPA 245.1
Molybdenum	0.029	mg/L	09/21/07	EPA 200.7
Nickel	0.025	mg/L	09/21/07	EPA 200.7
Potassium	8.4	mg/L	09/21/07	EPA 200.7
Selenium	< 0.050	mg/L	09/21/07	EPA 200.7
Silica	23	mg/L	09/21/07	EPA 200.7
Silver	< 0.010	mg/L	09/21/07	EPA 200.7
Sodium	19	mg/L	09/21/07	EPA 200.7
Thallium	< 0.050	mg/L	09/21/07	EPA 200.7
Vanadium	< 0.0050	mg/L	09/21/07	EPA 200.7
Zinc	0.011	mg/L	09/21/07	EPA 200.7

Reporting Analyst: JAB
Date Reported: 10/02/07
Copies To: File

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Laboratory Customer Service - (785) 296-1620
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BUREAU OF

ENVIRONMENTAL REMEDIATION



DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV REMEDIATION Analysis Code: PT Lab Number: 498807
ATTN: Bob Benne
CURTIS SOB SUITE 410
TOPEKA KS 66612
4EM80
Site ID: 08772288
Account Code: EP
Collection Location: Standard Products, Inc. (SPI) - #2
Collector: REB - BER Matrix: Water Collect Depth:
Date/Time Collected: 09/05/07 00:00 Date/Time Received: 09/06/07 15:29
Sample Comments: filtered H2O

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum	< 0.050	mg/L	09/21/07	EPA 200.7
Antimony	< 0.050	mg/L	09/21/07	EPA 200.7
Arsenic	< 0.050	mg/L	09/21/07	EPA 200.7
Barium	0.086	mg/L	09/21/07	EPA 200.7
Beryllium	< 0.0010	mg/L	09/21/07	EPA 200.7
Boron	0.28	mg/L	09/21/07	EPA 200.7
Cadmium	< 0.0050	mg/L	09/21/07	EPA 200.7
Calcium	150	mg/L	09/21/07	EPA 200.7
Chromium	< 0.010	mg/L	09/21/07	EPA 200.7
Cobalt	< 0.010	mg/L	09/21/07	EPA 200.7
Copper	< 0.010	mg/L	09/21/07	EPA 200.7
Iron	0.73	mg/L	09/21/07	EPA 200.7
Lead	< 0.050	mg/L	09/21/07	EPA 200.7
Magnesium	28	mg/L	09/21/07	EPA 200.7
Manganese	0.24	mg/L	09/21/07	EPA 200.7
Mercury	< 0.50	ug/L	09/19/07	EPA 245.1
Molybdenum	0.021	mg/L	09/21/07	EPA 200.7
Nickel	0.039	mg/L	09/21/07	EPA 200.7
Potassium	6.2	mg/L	09/21/07	EPA 200.7
Selenium	< 0.050	mg/L	09/21/07	EPA 200.7
Silica	14	mg/L	09/21/07	EPA 200.7
Silver	< 0.010	mg/L	09/21/07	EPA 200.7
Sodium	140	mg/L	09/21/07	EPA 200.7
Thallium	< 0.050	mg/L	09/21/07	EPA 200.7
Vanadium	< 0.0050	mg/L	09/21/07	EPA 200.7
Zinc	0.032	mg/L	09/21/07	EPA 200.7

Reporting Analyst: JAB
Date Reported: 10/02/07
Copies To: File

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Laboratory Customer Service - (785) 296-1620
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DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV. REMEDIATION Analysis Code: PT Lab Number: 498808
ATTN: Bob Benne 4EM80
CURTIS SOB, SUITE 410 Site ID: 08772288
TOPEKA KS 66612 Account Code: EP

Collection Location: Standard Products, Inc. (SPI) - #4
Collector: REB - BER Matrix: Water Collect Depth:
Date/Time Collected: 09/05/07 00:00 Date/Time Received: 09/06/07 15:30

Sample Comments: Filtered H2O

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum	< 0.050	mg/L	09/21/07	EPA 200.7
Antimony	< 0.050	mg/L	09/21/07	EPA 200.7
Arsenic	< 0.050	mg/L	09/21/07	EPA 200.7
Barium	0.074	mg/L	09/21/07	EPA 200.7
Beryllium	< 0.0010	mg/L	09/21/07	EPA 200.7
Boron	0.30	mg/L	09/21/07	EPA 200.7
Cadmium	< 0.0050	mg/L	09/21/07	EPA 200.7
Calcium	160	mg/L	09/21/07	EPA 200.7
Chromium	< 0.010	mg/L	09/21/07	EPA 200.7
Cobalt	< 0.010	mg/L	09/21/07	EPA 200.7
Copper	< 0.010	mg/L	09/21/07	EPA 200.7
Iron	0.016	mg/L	09/21/07	EPA 200.7
Lead	< 0.050	mg/L	09/21/07	EPA 200.7
Magnesium	28	mg/L	09/21/07	EPA 200.7
Manganese	0.22	mg/L	09/21/07	EPA 200.7
Mercury	< 0.50	ug/L	09/19/07	EPA 245.1
Molybdenum	0.021	mg/L	09/21/07	EPA 200.7
Nickel	0.037	mg/L	09/21/07	EPA 200.7
Potassium	5.9	mg/L	09/21/07	EPA 200.7
Selenium	< 0.050	mg/L	09/21/07	EPA 200.7
Silica	14	mg/L	09/21/07	EPA 200.7
Silver	< 0.010	mg/L	09/21/07	EPA 200.7
Sodium	120	mg/L	09/21/07	EPA 200.7
Thallium	< 0.050	mg/L	09/21/07	EPA 200.7
Vanadium	< 0.0050	mg/L	09/21/07	EPA 200.7
Zinc	0.027	mg/L	09/21/07	EPA 200.7

Reporting Analyst: JAB
Date Reported: 10/02/07
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Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
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DIVISION OF HEALTH & ENVIRONMENTAL LABORATORIES
Kansas Department of Health and Environment
Forbes Field, Bldg. 740, Topeka, Kansas 66620-0001



REPORT OF ANALYSIS

INORGANIC CHEMISTRY

Report To: BUREAU OF ENV. REMEDIATION Analysis Code: PT Lab Number: 503199
ATTN: Bob Benne 4EM80
CURTIS SOB, SUITE 410 Site ID: 08772288
TOPEKA KS 66612 Account Code: EP

Collection Location: Standard Products, Inc. - SPI #5
Collector: REB - BER Matrix: Water Collect Depth:
Date/Time Collected: 12/05/07 00:00 Date/Time Received: 12/06/07 14:43

Sample Comments: The water is filtered

Parameter	Analytical Result	Units	Analysis Date	Analytical Method
Aluminum	< 0.050	mg/L	12/20/07	EPA 200.7
Antimony	< 0.050	mg/L	12/20/07	EPA 200.7
Arsenic	< 0.050	mg/L	12/20/07	EPA 200.7
Barium	0.11	mg/L	12/20/07	EPA 200.7
Beryllium	< 0.0010	mg/L	12/20/07	EPA 200.7
Boron	0.34	mg/L	12/20/07	EPA 200.7
Cadmium	< 0.0050	mg/L	12/20/07	EPA 200.7
Calcium	170	mg/L	12/20/07	EPA 200.7
Chromium	< 0.010	mg/L	12/20/07	EPA 200.7
Cobalt	0.018	mg/L	12/20/07	EPA 200.7
Copper	< 0.010	mg/L	12/20/07	EPA 200.7
Iron	< 0.010	mg/L	12/20/07	EPA 200.7
Lead	< 0.050	mg/L	12/20/07	EPA 200.7
Magnesium	20	mg/L	12/20/07	EPA 200.7
Manganese	0.60	mg/L	12/20/07	EPA 200.7
Mercury	< 0.50	ug/L	12/14/07	EPA 245.1
Molybdenum	< 0.020	mg/L	12/20/07	EPA 200.7
Nickel	0.018	mg/L	12/20/07	EPA 200.7
Potassium	6.7	mg/L	12/20/07	EPA 200.7
Selenium	< 0.050	mg/L	12/20/07	EPA 200.7
Silica	21	mg/L	12/20/07	EPA 200.7
Silver	< 0.010	mg/L	12/20/07	EPA 200.7
Sodium	57	mg/L	12/20/07	EPA 200.7
Thallium	< 0.050	mg/L	12/20/07	EPA 200.7
Vanadium	< 0.0050	mg/L	12/20/07	EPA 200.7
Zinc	0.047	mg/L	12/20/07	EPA 200.7

Reporting Analyst: JAB
Date Reported: 12/27/07
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Laboratory Customer Service - (785) 296-1620
Laboratory Fax - (785) 296-1641
CLIA No. 17D0648264

BUREAU OF
ENVIRONMENTAL REMEDIATION

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #2

Radiochemistry

Lab Sample ID: F7L110245-007 Date Collected: 12/05/07 0000
Work Order: KDW47 Date Received: 12/11/07 0945
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				pCi/L	Batch # 7345421		Yld % 103
Radium (226)	0.42	J	0.18	1.00	0.18	12/11/07	12/26/07

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #4

Radiochemistry

Lab Sample ID: F7L110245-008 Date Collected: 12/05/07 0000
Work Order: KDW49 Date Received: 12/11/07 0945
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				pCi/L	Batch # 7345421		Yld % 103
Radium (226)	0.45	J	0.18	1.00	0.20	12/11/07	12/26/07

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI BACKGROUND

Radiochemistry

Lab Sample ID: F7L110245-005 Date Collected: 12/05/07 0000
Work Order: KDW45 Date Received: 12/11/07 0945
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				pCi/L	Batch # 7345421	Yld % 106	
Radium (226)	0.45	J	0.18	1.00	0.17	12/11/07	12/26/07

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.

Lot# F7L110245

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #1

Radiochemistry

Lab Sample ID: F7L110245-006 Date Collected: 12/05/07 0000
Work Order: KDW46 Date Received: 12/11/07 0945
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				pCi/L	Batch # 7345421	Yld % 85	
Radium (226)	0.40	J	0.18	1.00	0.10	12/11/07	12/26/07

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.

Lot# F7L110245

TestAmerica St. Louis

Kansas Dept of Health and Environment

Client Sample ID: SPI #5

Radiochemistry

Lab Sample ID: F7L110245-004
Work Order: KDW43
Matrix: WATER

Date Collected: 12/05/07 0000
Date Received: 12/11/07 0945

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				pCi/L		Batch # 7345421	Yld # 109
Radium (226)	156		13	1	0.2	12/11/07	12/26/07

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Hold results are greater than the MDC